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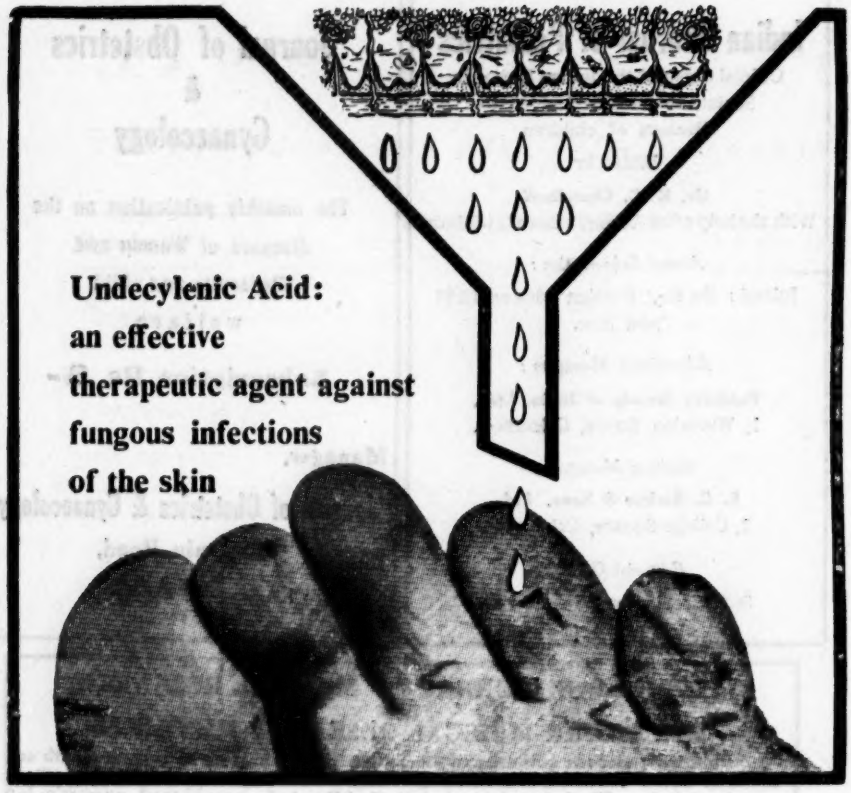

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Editor: U. B. NARAYANRAO

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The Modern trends in diagnosis and treatment of Venereal Diseases*

By

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The problem of venereal diseases will always be there as long as man exists. It may be controlled to a great extent, but can never be completely overcome. It is possible in small communities and nations to aim and achieve utopian standards, but one could confidently say that it would be a herculean task in our country and may be impossible for some generations to come.

The recent advances in the study of venereal diseases have been mainly in three directions.

(a) advances in therapy.
(b) advances in diagnosis and experimental research.
(c) advances in prevention and public health methods.

In no branch of medicine, has therapy advanced with times as in that of Venereology. Great strides have been taken early in this century, and more so in the last decade. To do fair justice to this aspect, it should be viewed as it applies to the main diseases.

Syphilis naturally leads the pageant. The present idea of the age of this disease is agreed to be the middle ages with the return of the discoverers of the New World. But yaws in Asia and Africa, bejel in the middle east, and pinta in Latin America are allied diseases to syphilis. Their causative organisms are morphologically similar to the Treponema pallida and serologically these diseases are indistinguishable. Some of them are acquired by non-venereal contact but their manifestations in man are mainly similar. Can it be that syphilis in some form or other existed in the old world? And was the disease, brought by Columbus in 1492, just a new fresh strain? These are questions which are being thought about for historical curiosity, but is of no real import further.

The W. H. O., has combined all these diseases as Treponematoses for their activities and I feel justly so.

* Lecture delivered at the XIX Annual Provincial Conference of the Andhra Medical Association at Masulipatam on 3-5-1953.

The various drugs used in the treatment of syphilis have been ranging from guaicum and holywood to mercury and iodides in the middle ages. The treatment was unsatisfactory throughout the Victorian era till 1910 when Ehrlich and Hata introduced arsphenamine (606) and started the age of arsenotherapy which rolled on till our times. Less toxic and more potent arsenicals were introduced like N. A. B. (914) and the least toxic but best among them--mapharside (Arsenoxides).

The efficacy of the trivalents was recognised early and also that of intravenous medication of arsenic over the intramuscular route. Arsenotherapy was combined with a heavy metal like bismuth and this regimen was able to arrest if not cure the ravages of the disease.

Various schedules and dosage of the arsenotherapy was advocated and all of them have borne fair success. But the one outstanding drawback has been and still is the toxic reactions, ranging from the fatal encephalopathy, dermatitis and necrosis of the liver to milder erythema and nitritoid crisis. But I may be permitted to emphasise here that in syphilotherapy as it stands to-day, arsenicals have little or no place and if one is forced to administer arsenicals for any condition the safest and only drug recommended is mapharside or arsenoxides.

The discovery of penicillin by Sir Alexander Fleming opened a new vista of antibiotics to the medical world.

Late in 1942 it was proved that penicillin was very effective in the treatment of syphilis. One of the first clinics to use penicillin for syphilis was the Army Clinic at Secunderabad in 1943, and used crude aqueous penicillin in dosages varying from 2 to 2.4 mega units in the course of 7 to 8 days administered every three hours round the clock. Difficulties of this arduous regimen was overcome slowly by delayed action repository penicillin. Even as early as 1944 to 1945 we noted the efficacy of this drug and the alarming number of re-infections noticed after treatment, even though disturbing at first, went to prove the high cure rate of penicillin therapy. This was reported by us in 1946, on the observations made on 750 cases after a followup of one year.

From 1943 to present day was a long story of experiments, expectations, trials, failures and successes. Now it is agreed by specialists all over the world that penicillin therapy has completely replaced arsenotherapy. The best penicillin to be used is procaine penicillin G with 2% aluminium monostearate with a few specifications regarding its density and size of floccules popularly called PAM.

One injection of 1 cc. of this PAM contains 300,000 units of penicillin and gives more than 24 hours of demonstrable bacteriostatic concentration in the tissues (blood).

Present schedule of treatment recommended is as follows :—

Early syphilis :—(a) Sero negative 3 mega units in 10 days.
(b) Sero positive 4.8 mega units in 16 days.

Late syphilis—6 mega units of PAM in 20 days.
Neuro syphilis—6 to 12 mega units or more.
Antenatal syphilis—6 mega units in 10 days.
Infantile congenital syphilis—1.2 to 2.4 mega units in 12 days.
Latent congenital syphilis—3 to 6 mega units.

Herein it will be noted that penicillin alone is advocated for all forms of syphilis. There is no necessity to give any other adjuvant treatment except more recent discoveries like cortisone in interstitial keratitis.

In no field of syphilis has penicillin done more service than in antenatal syphilis. One is able to say with great candour the birth of a live child in a syphilitic woman. It is also never too late to treat an antenatal case though earlier is better.

There are very few toxic reactions of penicillin and they are generally mild. Penicillin sensitivity reactions have very rarely led to grave results. Dermatitis is also rare and generally of a mild type. Apart from the above, there is not much to speak of against penicillin.

Herxheimer reaction is met with as in arsenotherapy but can be avoided by precautions. But the Herxheimer reaction against which one is warned, to be met in the treatment of cardio-vascular syphilis and neuro-syphilis is rather overemphasised and the American opinion as well as ours confirm this.

Now assessing the value of penicillin in syphilotherapy the cure rate is over 70% in early syphilis which compares very favourably with arsenic metal therapy. Relapse rate is said to be slightly higher but here one should bear in mind that reinfections are more common in penicillin therapy due to the shortness of the course and may be wrongly taken as relapses. In latent and late syphilis, penicillin has showed superiority over all other forms of therapy in the arrest of the progress of the disease. In maternal and infantile syphilis penicillin therapy stands head and shoulders high and reaches the ideal.

Summarising, the ease of administration, the non-toxic nature of the drug, the high cure rate, the extreme shortness of the course, and thereby a remarkable rise in regularity and completion of the treatment never before known, penicillin has established itself as the ideal drug for syphilotherapy.

Here indeed is the dream of Ehrlich "Therapia Sterilas Magnas" realised not with arsenic but with penicillin.

Stokes in 1943 wrote about penicillin in syphilis as follows:-"It will take a year to guess, two years to intimate, five years to indicate, a decade or more to

know what Penicillin does in Syphilis" and we can safely say that the drug has successfully passed this rigorous test set by the father of syphilology.

Among the other antibiotics only aureomycin is mentioned as useful in certain form of syphilis. American workers have reported a certain superiority and efficay of this drug in neuro—syphilis, the dosage employed being 1 gramme a day for 4–6 weeks. This is still in the experimental stage.

The next disease in order of present day importance is lymphogranuloma inguinale, a disease caused by a virus, giving rise to suppurative involvement of the inguinal nodes and sometimes ulcerative lesion of the genitalia inclusive of the anorectal syndrome.

Treatment of this condition was very unsatisfactory, except for the inguinale variety which responds fairly to sulpha group of drugs and antimonials.

Recently it was found that aureomycin, terramycin, and chloromycetin have a definite antiviral action in this malady. Greenblatt and Coworkers have reported uniformly good results lately. After prolonged trials both clinically and antigenically, the Visakhapatnam Clinic uses aureomycin as the drug of choice in the treatment of L. G. I. It was noticed that the antibody level in the sera falls rapidly after treatment with this drug and soon gives a negative complement fixation test and Frei's test facts which are highly significant. The dosage of aureomycin employed being 1 gramme a day for 20 to 30 days. Favourable reports are coming in regarding the other two drugs mentioned.

If a dense fibrous stricture has formed this therapy will not cure the condition except to overcome the existing infection and the case has reached the domains of the Surgeon for dilatation or resection of the stricture bearing area. But all other forms like ulcerative and hypertrophic, inclusive of any case of stricture with proctitis do well with this therapy.

The third disease is venereal granuloma which is caused by a Donovan body found intracellular in the tissue smears from lesions. Much remains to be studied about this whether the Donovan body is a protozoan, bacterium or a virus.

This disease causes extensive ulcerations spreading all round from the genitalia, and the mutilative lesions are common. There is no tendency to heal and therapy was limited and inadequate. Recurrences were the rule and the agony and malnutrition led many a patient to take an easy way out of life.

The antibiotic era held high hopes against this disease and streptomycin was found to be highly efficient. Greenblatt and Co-workers were the pioneers in this therapy and have reported good results. Rajam and Rangiah of Madras and the Visakhaptnam Clinic have confirmed these findings. Healing of the lesions was quick and dramatic and complete cure was possible in majority of

the cases. American workers used a rather high dosage but in our clinic satisfactory results have been obtained with 1 to 1½ grammes a day for 20 days. Taking the body weight gramme ratio of the above dosage it is more or less the same as that used by our compeers across the seas.

But unhappily failures were not uncommon. Greenblatt has summarised his five years' experience in the treatment of this disease and has come to a conclusion that while streptomycin is the drug of choice for venereal granuloma due to its relative cheapness, failures are not uncommon. He asserts that aureomycin and terramycin are superior to streptomycin and that failures are not met with in the use of aureomycin.

While agreeing with the above findings, we subscribe that aureomycin has a great place in the treatment of venereal granuloma and in our series of over 20 cases treated thus, there has been no failure after a followup of one year (this has been communicated for publication).

We noticed that healing started within 48 hours after institution of aureomycin and Donovan body disappeared within a week and complete healing was the rule by the end of the course. We also found that in the day to day smears a general dimunition in size and number of organisms present, with a tendency for them to splinter and fragment into dust by the 6th to 7th day of treatment and that the extra cellular forms were the first to disappear.

While passing on to the less known disease, but one which is assuming more importance lately (i. e.) non-specific urethritis, I should mention what is happening to his more famous and illustrious brother gonorrhoea.

While agreeing with the american authors, who have practically written off gonorrhoea as a major disease, I should say rather sadly that the importance of the Venereologist was cut down half thereby. Gonorrhoea with its vagaries, complications and elusive tendencies was full time work for us, time consuming and brain recking. Venereologists were called Venereal Surgeons mainly due to the work employed by us against this disease.

Now I do not consider gonorrhoea a major problem, except for diagnosis. Gonococci being in the lowest rung of the bacterial spectrum naturally fell to the attack of antibiotics and nearly a cent per cent cure rate was possible which we never thought of in our fondest dreams. In no field of medicine has penicillin left such a deep everlasting impression as in the treatment of gonorrhoea.

Now as this recedes from the field as a major problem we are meeting with more cases of abacterial urethritis, wherein the patient exhibits a profuse urethral discharge showing plenty of leucocytes under the microscope but no organism can be demonstrated or grown in culture. Deinst and Co-workers thought this disease may be due to a pleuro-pneumonia like organism (PPO) whereas

Harkness and co-workers propounded a theory of L bodies. Virus was mentioned but has never been substantiated.

Two things have struck me as probable. Freundt of Copenhagen demonstrated that organisms grown under graded unfavourable circumstances can go into a minute form called L. form and on reversing this process the original organism can be obtained. Can it be that Solomon was right in 1944 in his idea that penicillin drove the gonococci to take on a cystic mutant form which in turn produces the abacterial urethritis ?

But one thing is definite that the increase in number of N. S. U. diagnosed was with the advent of antibiotics. This condition is now the headache of Venereologists as it does not respond well to drugs and other medications. Wilcox has reported favourable results with terramycin and the Visakhapatnam Clinic has reported a few cases favourably treated with aureomycin.

The other less important venereal diseases are too many to be touched upon but before passing on to the next phase of the problem I would be failing in my duty if I do not give a note of a warning about the indiscriminate use of antibiotics in our times. Resistant organisms may be produced by indiscrimate under dosages and sensitiveness against them may be established in the individual which will make life saving drugs useless for him. So I pray that a proper diagnosis should be made before therapy is started and wherever possible antibiotics should be used against known susceptible organisms or after susceptibility tests.

Dramatic results have been obtained in the diagnostic aspect of venereal diseases. I shall touch upon the more important ones. The age old Wasserman reaction has been improved upon. Harrisson Wyler perfected a technique suitable to small laboratories. Richardson by his preserved complement solved a constant problem to the Serologist and Richardson and Price improved upon the W. R. by their theory of Optimum Proportions. They demonstrated that the specificity and sensitivity of the beef extract was best at about 1/360 dilution and not at 1/15 or 1/20 as used in our laboratories and no wonder a plethora of false positives exists here. Price by his rational method of calculating the complement to be used by his new titrations, took a step further toward accuracy. Mary Pangborn by her highly purified extract of Cardiolipin and Lecithin, added yet another step towards perfection of the Wasserman reaction.

In other countries the Cardiolipin antigen alone is being used for the complement fixing test as well as for other precipitant reactions like VDRL and Kahn tests. Here it is significant to say that Reuben. L. Kahn, the doyen of serology, has modified his test to use cardiolipin antigen.

More emphasis is now attached to quantitative tests for diagnostic and prognostic purposes. It is well known that a rising titre in WR is a definite

pointer of syphilis and a drop in titre shows the efficacy of the drug. Serological relapse and the above can only be appreciated by quantitative WR. Again the drop in serological titre is gradual after treatment with penicillin and it may take a few months to a year to attain the negative phase and the progress of this case can never be assessed by qualitative tests of the serum. I shall not wander into methods of evaluating Biological false positive reactions, inclusive of the Universal Serological reactions of Kahn and Euglobulin reactions.

Recently Nelson reported he could keep the Treponema alive for over 90 days. This set up a new field which resulted in the test known as Nelson's Treponemal Immobilisation test wherein the antibody in the patients serum is made to arrest the motility of the organism and later to bring about its death.

This is indeed a great advancement in the region of serology of syphilis. This being a specific test, it would of great use in the evaluation of problem sera. We hope that this test will be perfected and started as a routine in major laboratories of our country.

I shall be failing in my duty as a clinician if I do not emphasise that it is bad to treat a Wasserman test and not the individual. When the cerebro-spinal fluid is examined either for diagnosis or for prognostic assessment of treatment, the number of cells and the quantity of protein present throw the greatest light to the clinician rather than all the other tests.

The diagnostic aids in other diseases have also showed progress like Frei's intracutaneous test and complement fixation test for L. G. I. The old Frei's antigen has been improved upon by yolk sac cultures of virus in embryonated eggs with a certainity of the presence and amount of the same. The same antigen is being used for the intracutaneous test as well as C. F. T., in different dilutions. Bedson and Barwell have shown that the C. F. T. is of great value. The Visakhapatnam Clinic uses the virus antigen grown in its laboratory and Frei's and complement fixing tests are done as diagnostic aids. Our observation was that the C. F. T. becomes positive earlier than Frei's test and by doing a quantitative test we are able to assess the value of drugs in the treatment of L. G. I.

The laboratory plays a great part in the diagnosis of gonorrhoea. Even though due to advances in therapy I have relegated this disease to a minor place, if proper diagnosis is not made, treatment could not be instituted early and we would be back in the pre-penicillin era with all its problems.

Wilkinson and Co-wrokers have stated the diagnosis of this disease is best made by culture of the organism. Although medico-legal problem of this disease may not be important in our country yet smear methods are fallacious as there are host of other gram negative organisms which are found intracellular to baffle us. It is relatively simple to culture this organism in special media and Wilkinson

in 1951 has proved from the London clinic how in women nearly 40% of gonorrhoea cases would have been undiagnosed but for this method.

Again the gonococcal complement fixation test of Price is found to be of good value in the diagnosis of chronic gonorrhoea in men and more so in obscure cases of pelvic pain in woman. We have used both these methods often though not as routine for lack of staff.

Passing on to the less understood disease of venereal granuloma we have few aids to diagnosis except the demonstration of Donovan body in tissue smears and biopsy reports. Anderson and Goodpasture have successfully cultured this Donovan body in yolk sacs of embryonated eggs and Dulaney and Koda have attempted intradermal and complement fixation tests with antigens from culture organism. Our clinic at Visakhapatnam is now studying the above possibilities of egg grown Donovan body, which is so far successful and aims at producing antigens for the above tests.

It would not be complete if I do not refer to the role of pathologists to help the clinician. Histopathological examinations are necessary for the diseases enumerated above as well as for examinations of scrapings from urethral mucosa for L. bodies. Few cases of venereal granuloma which border in the region of malignancy have to be evaluated by them. Rajam and Rangiah have reported such cases recently and even though we have met with two such cases during the last two years, one is hesitant to express further opinion as such cases are *rare* and the possibility of a cancerous state apart from the Donovan infection has to be thought of.

Again going back to infantile syphilis, if a systematic regular histological examination of the placenta and other foetal structures are done, a higher incidence of syphilis may be traced and treatment instituted earlier. Research minded clinicians always go hand in hand with a pathologist and I am sure for mutual benefit.

We are fortunate to have in Madras an Upgraded Venereal Diseases Department of All India status under the direction of Dr. R. V. Rajam and his colleagues. Much is expected from them and I am confident a great deal of research will be done to place the institute as a centre of research. I would suggest that a reference laboratory also should be instituted on a high level basis to do serological work for the province wherein problem sera from various laboratories may be evaluated and a decision given. Standard antigens may be made on a mass scale there and sent all over to have a uniformity.

I found that both in the Staten Serum Institute at Copenhagen and Dr. Price's laboratory in London, facilities were available to reproduce any type of test done in the country not only to evaluate the problem sera but to give an honest opinion on the procedure of the contributors' method of testing.

I dare say that things as they are now in Venereology, when the diseases are losing their terrors on the clinician, the need of well established laboratories to diagnose and assess diseases properly is a prime necessity. If any foreign journal of venereal diseases is perused one is amazed to find it full of experimental research and other laboratory work and the relegation of the clinician to a minor role. This shows the trend of modern medicine as a whole and more so in Venereology.

Prevention of venereal diseases, social work to eradicate the reservoirs of infection, propaganda to bring home the truths of the disease to one and all by posters and film shows play a great part in modern therapy. Naturally this is the domain of the Health Department and in many countries, venereal clinics are part of the Health Division. Such unification is to be thought of in our country too, to facilitate field work and mass diagnosis and treatment. This part of the programme is not well carried out in our country as we confine our social work to our immediate surroundings.

Statistics in a country of famous mathematicians as ours is very poor indeed. I would suggest the maintenance of Central Syphilis Register for every province and legislation to make venereal diseases a notifiable disease to make the above scheme a success.

I shall close with a fond hope that in India scientific medicine will grow to gigantic proportions soon and the abundant clinical material at our disposal will place our country abreast with the Western nations.

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Some Problems in Syphilis *

By
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At the very beginning it is my duty to thank the organizers of the 19th Andhra Provincial Medical Confernce (held at Masulipatam on the 2nd May 1953) for affording me this opportunity to take part in the symposium on "Venereal Diseases". We have just now heard a vivid account on the Diagnostic and Therapeutic aspects of venereal diseases by Dr. M. V. Krishnamurthy. He has done well in pointing out the extreme importance and the necessity of liaison between the pathologist and the clinician and emphasised the supreme role of laboratory in the diagnosis of venereal diseases. My words may not serve any useful purpose in the present setup of the laboratory organization in our state but hoping in the near future the Government will insist on every municipality and major panchayat to provide adequate laboratory facilities to medical practitioners, I have now ventured to administer this bitter pill on you. I wish to limit my talk by way of supplementing to what has been said already. The evaluation of serological false positive, some of the more common manifestations of syphilis that are likely to be missed by the practitioner and maternal syphilis, cause of still-births and neonatal deaths form the subject of my talk.

* Paper read at the 19th Andhra Medical Conference held on 2nd May 1953.

Syphilis as you know is a systemic infection, characterised by a few distinct clinical manifestations. The spirochaetes have colonised by the time the primary chancre is manifest. Thanks to the discovery by Schaudin and Hoffmann in 1905, the causative organism in the primary and secondary lesions of syphilis could be demonstrated. In the tertiary and late stages of syphilis the spirochaetal life history disables the clinical pathologist from demonstrating the organism for the benefit of the clinician. Its disguise is so great and masterly that it often stimulates signs and symptoms of any disease. This stimulated Von Wassermann in 1906 to perfect the complement fixation test, using syphilitic tissue as antigen for serological diagnosis and assessment of syphilo-therapy. A year later Levadatii used non-syphilitic tissue as the antigen and proved the non-specificity of the test. As the reagents entering Wassermann reaction are multiple and are likely to cause technical errors, Reuben Kahn of America in 1920 described the floucculation test for syphilis, based on the original observations of Kraus in 1890. This is now known as the standard Kahn test for syphilis.

Single serologic positivity cannot condemn a person as syphilitic unless clinical evidence is in support of it. This is similar to, that all Widals do not necessarily indicate enteric fever. The observations by many, of a positive Wassermann and Kahn in the normal human beings and animals and in diseases other than syphilis led Reuben Kahn and others to improve on the specificity of these tests. In 1940 Kahn perfected the verification test and it was found that at lower saline concentrations and at low temperatures, precipitation was marked in non-syphilitic sera while higher salt concentrations and at 37° centigrade flocculation was maximum in the case of syphilitic sera.

Illus. 1. A fiancee gave a weak positive Kahn. No clinical evidence of syphilis was observed. Marked precipitation at cold temperature was observed by the verification test.

Illus. 2. A young man was Kahn positive and by verification test negative. He had recovered from acute respiratory infection a month ago.

But this did not solve the problem of false positives. Pangborn in 1941 used a more specific antigen, Cardio-Lipin, which is now used widely in Wassermann, Kahn and other flocculation slide tests like VDRL. Even this did not eliminate false positives.

It was soon realized that false positives must have a basis in health or in disease in as much as it indicates a Lipid antigen-anti-body reaction. Sulzberger appropriately termed false positives as unfortunate for biologically every reaction given by a serum under correct technical conditions is of significance and cannot be false. This enabled Kahn to investigate all cases of false positives before declaring one as syphilitic or suffering from non-syphilitic diseases. A positive flocculation test in the normal he attributes to the Lipid antigen-antibody reaction,

a result of day to day wear and tear of tissues. Auto-antibodies so produced vary in amount and quality, conditioned by the amount and type of Lipid antigen liberated by tissue destruction in the normal or in disease. Based on this, a universal serological reaction, hereinafter to be referred as USR, with varying dilutions of serum (0-1/640) in increasing salt concentrations (0-2.1%) without and with incubation at ice-box temperature of 4 and 24 hours was developed by Kahn in 1946.

Syphilitic sera give flocculation at 37°C and higher salt concentration while false positives are encountered at lower concentrations of saline. Graphs plotted against serum dilutions provide distinct patterns in the normal and disease of USR. USR pattern in health is constant and any variation in this with increased precipitation signifies some pathological change in tissues. Alteration in USR pattern on repeat examinations indicates disease. USR is intensified in disease by increased tissue destruction. The patterns of this reaction are distinct for syphilis, leprosy, tuberculosis, diabetes, cancer, pneumonia etc. It is now known that any and all diseases and any and all injections of proteins or organic matter whether they be for immunisation or other reasons may for some reason in some call forth positive reaction in tests for syphilis. These positives may be conditioned by diet or may occur even in normal. Acquired USR in disease is the result of liberation of large quantities of antibodies that are qualitatively distinct in syphilis and in non-syphilitic diseases. Thus the USR not only is specific test for syphilis but suggests to the clinician the latent non-syphilitic diseases.

Yet another recent advance in the serologic diagnosis of syphilis in minimising false positives is the introduction in 1939 of Treponema Immobilization Test of Nelson and Meyer. These workers observed that syphilitic sera in the presence of complement immobilized a suspension of Treponemas experimentally recovered from rabbit's early testicular syphilomata. The test is based on the fact that specific circulating Treponemal antibodies exist in syphilitic sera. Virulent treponemas only give a positive TPI. So far Nelson and Meyer reported positive TPI in active, latent or asymptomatic cases of syphilis only. 42.5% of reagin positive tests were TPI negative and so were false positives. They had recent immunizations or infections accounting for 28.5%, while 71.5% were healthy individuals.

Plasmodium Vivax infections cause false positive results in Kolmer, Kahn, VDRL etc., tests and false positives were less when cardio-lipin antigen was used. In experimentally induced plasmodium vivax infections in man at the time of peak of parasitaemia TPI gave no false positive reactions. Nelson reported this year TPI was not positive in non-syphilitic, for 80 medical students with reliable negative history at John Hopkins were negative for TPI. Another 87 with negative history and seronegative were TPI negative. Thus TPI test or its future modification will serve as a final criterion for diagnosis in

patients with suspected latent syphilis on the basis of a positive standard reagin test. When TPI is negative in false reagin positive cases, medical examination is to be made to eliminate or spot the disease to account for the false positive reagin test.

Quantitative Kahn Test:

It is well known that the tissue destruction in primary chancre, in diffuse fibrosis of the testis, or in the limited and localised destruction in cardio-vascular syphilis, weak or sometimes doubtful reagin reactions are obtained. The quantitative Kahn decides the issue in these cases. Gummatous destruction followed by fibrosis of liver often remains asymptomatic and a battery of liver function tests reveal no impairment but the high titre of quantitative Kahn discloses the massive hepatic damage. Quantitative Kahn often decides the problem whether the new-born is a congenital syphilitic or not. It discloses asymptomatic congenital syphilis and eliminates from mere placental transmission of antibody, for persistence of titre in amounts greater than in the mother favor infection and active disease. It is the only measuring rod of the efficacy of syphilotherapy for progressive cure is paralleled by an adequate fall in titre, touching base line and any relapse by way of a rise in titre is a certain indication of an impending clinical relapse.

Syphilis of the Heart and Vessels:

Syphilis accounts for 5% in the White and 30% in the negro races of all the diseases of the heart. Nearly 80% of syphilitic patients have grossly or microscopically demonstrable disease of aorta. 20% of syphilitic aortitis are clinically latent. 25% develop aneurysms while an equal number unfortunately develop partial or total occlusion of coronaries. Minor dilatation of aorta, result of mesoaortitis, is clinically difficult to spot. A week positive reagin test suggests the syphilitic infection while the latent lesion is disclosed by angiocardiography. Angiocardiography alone reveals aortic dilatation with or without aneurysm, tortuosity, calcification and any irregularity of the lumen. Conventional chest films rarely reveal early aortitis. Linear calcifications of ascending aorta signifies aortic syphilis. In 40% of aortic syphilis occlusion of coronary ostia are seen. Nocturnal dyspnoea and angina at or below 40 years are in favour of syphilis. Unexpected sudden deaths are often the result of aneurysmal rupture and cardiac tampanade.

Osseous Syphilis:

I feel it is my duty to remind the practitioners the large number of cases of osseous syphilis. During the secondary stage or later, syphilitic periosteitis, and osteitis of the shaft of the long bones, sternum and clavicle are heralded by nocturnal pain associated with sooner or later by diffuse swelling. The process at this stage is reversible by appropriate treatment.

Syphilis of Central Nervous System:

Meningo-vascular and parenchymal syphilis of the central nervous system are not rare. Fleeting clinical manifestations of the third, fourth, and sixth cranial nerve palsies are sufficient to remind you of syphilitic basal meningitis. General paralysis of the insane and tabes dorsalis are not commonly met with in our country. Transverse myelitis occuring at the second stage of syphilis or years later is the result of endarteritis and thrombosis of spinal arteries. Queer, unexplainable clinical symptoms in the aged may be due to syphilis (fits etc.) Serology confirms. Syphilis accounts for 10% of mental diseases. A positive CSF Wassermann does not indicate active disease. CSF, like a mirror, reflects the tissue changes that take place in the central nervous system. A rise in protein, a positive globulin test coupled with characteristic Lange's colloid curve and a pleocytosis indicate active disease. Their reversal to normality after syphilotherapy is the only indication of complete cure. Any secondary rise in protein or cells indicates threatening reactivity of the syphilitic process.

Maternal syphilis, cause of still-births and neonatal deaths:

In a two year clinico-pathological study of 162 still-births and neonatal deaths at the King George Hospital, Viskapatnam, Ratnavati and myself found 4 still births and one neonatal death were the result of maternal syphilis. This finding of ours is in agreement with the findings of others in that Maternal syphilis does not commonly contribute to significantly large number of still-births and neonatal deaths. A majority of macerated foetuses and premature births are due to toxaemias of pregnancy or poor nutritional state of the mothers.

Conclusions:

1. An evaluation of False Serological Positives is necessary in industry, anti-marital, anti-partum states and mass treponemal surveys.

2. The Universal Serological Reaction not only differentiates syphilitic from non-syphilitic sera but helps as a pointer to some latent pathologic state in the body.

3. False positives are a distress as they are likely to stake the reputation of families.

4. Syphilotherapy and its efficacy are assessed by quantitative Kahn and any clinical relapse is indicated by a precedent relapse in the titres of quantitative Kahn.

5. A single positive serologic test of syphilis does not mean syphilis, the final diagnosis rests with the clinician, thus emphasising the supreme need for constant liasion between the Pathologist and the Clinician.

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Treatment of Acute Gonococcal Urethritis in the Male with Chloramphenicol (Chloromycetin)

By

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A brief clinical study was undertaken in the V. D. Department of the J. J Hospital to determine the efficacy and suitability of chloromycetin in the treatment of gonococcal urethritis. This preliminary survey only refers to the action of the drug on acute gonococcal urethritis (without complication) in the male. No attempt has been made to determine its efficacy in chronic cases or on the various complications ordinarily associated with neisserian infection.

A number of reports have appeared in medical journals describing the effect of this antibiotic on gonococcal infections. "Treatment of gonorrhoea with chloramphenicol"—Greaves, MacDonald, Romansky and Taggart, J. Ven. Dis. Inform. 31 : 261, 1950. "Chloromycetin (chloramphenicol) and penicillin in gonococcal urethritis." Butler, Brewer, Condit and Johnston. Am. J. of Syph. Gon. and Ven. Dis. 36 : 269 May 1952. Rajam and Rangiah published in the Madras Med. Journal 1 April '51, the results of a similar study on thirty patients carried out in the Venereal Department of Government General Hospital, Madras.

Three different dosage schedules were tried, though the total dose was the same in all. Schedule A consisted of 3 gm. of chloromycetin administered in a single dose. In schedule B the drug was administered in two doses of 1.5 gm. each with an interval of half an hour between the doses. In Schedule C three doses of 1 gm. each were given with an interval of half an hour between successive doses. Eighteen patients were treated according to Schedule A, twelve according to Schedule B and fifteen according to Schedule C. As these were ambulatory

cases attending the O. P. D. the drug had to be administered within a short time. The patients swallowed the twelve capsules without difficulty and this was witnessed in each case by a member of the staff.

Of the forty-five patients who received treatment eight defaulted and did not report for subsequent examinations.

Toxic reactions observed were mild in character though diverse in nature. The commonest complaint, repeated by ten patients, was a bitter taste in the mouth lasting from four to twelve hours. Frequency of stools, two to three, was present in eight patients and five complained of pains and aches all over the body. Other reactions observed were headache, nausea, giddiness and thirst in occasional cases. Evidences of vitamin B deficiency, such as red granular glossitis or pharyngitis were not noticeable in any of these patients.

The diagnosis in all cases was made after microscopic examination of urethral smears.

The duration of the urethral discharge in these cases prior to the institution of therapy varied from one day to one month, the average being 6.14 days.

Thirty-seven patients out of the forty-five treated reported for follow up examinations.

Thirty three patients were submitted to smear tests only. Four had culture tests in addition to smear tests.

The follow-up period ranged from two days to twenty days, the average being six days.

Laboratory examinations were carried out in the mornings during the out-patients attendance hours, and could not be repeated oftener than once in twenty-four hours. Of sixteen patients who had smear tests twenty-four hours after treatment only one showed the presence of gonococci and these had disappeared when the examination was repeated twenty-four hours later. Of the remaining twenty-one patients who had smear tests forty-eight hours or more after treatment, none showed the presence of gonococci. All subsequent smear and culture reports were negative except in one case.

One patient reported again, seventeen days after chloromycetin treatment with a fresh purulent discharge per urethra which on examination showed the presence of gonococci. Following the treatment of the previous attack of urethritis, the patients had been clinically free from symptoms and the urethral smear reports were negative on the third and seventh days. Patient admitted re-exposures with the same woman (the original source of infection), subsequent to these laboratory examinations. The contact could not be obtained for examination. This evidently appears to be a case of reinfection. (If it is accepted as such, the case indicates the total absence of even a short-lived immunity, and probably against the same strain of the gonococcus).

If this one failure is accepted as a reinfection the cure rate in the present series works out at 100%.

With the very brief follow-up obtainable in these cases it was not possible to determine the effects of this dose of chloromycetin on concomittant syphilitic infection. Whether it modifies the incubation period of syphilis or interferes with the dark ground examinations and serologic tests is still a moot point, though according to some reports published earlier, the drug, even in such small doses, has the ability to mask a simultaneously acquired syphilitic infection, and hence a proper post-treatment surveillance, extending over a period of six months, is advised.

SUMMARY

Forty-five male patients with acute gonococcal urethritis received 3 gm. of chloromycetin each by mouth.

Three different dosage schedule were employed as indicated above, as these were ambulatory cases attending the O. P. D. The total dose of the drug (3 gm.) was administered in an hour or less.

All three dosage schedules gave identical results and appeared to be equally satisfactory.

Eight patients defaulted after treatment and did not report for subsequent surveillance and tests of cure.

The results of treatment are shown in the table :—

Male patients with acute gonococcal urethritis treated with 3 gm. of chloromycetin by mouth

Patients treated	Patients lost to follow-up	Patients treated & observed	Failures	Cure rate (percent)	Probable reinfections	Optimum cure rate (percent)
45	8	37	1	97.4	1	100

If the one failure, reported above, is accepted as a reinfection the cure rate in this series works out at 100%. It must be admitted that the observation period subsequent to treatment was very short, viz. six days.

CONCLUSIONS

Chloromycetin, in 3 gm. doses, administered orally, is found to be an effective therapeutic agent for the treatment of acute gonococcal urethritis in the male. In most cases, the gonococci disappeared from the discharge within twenty-four hours of the administration of the drug.

The 3 gm. dose is well tolerated; the toxic reactions are mild and do not militate against the use of the drug in such cases.

Where concomittant chancroidal and/or granuloma infections are present, the drug would take precedence over penicillin, being effective against all three infections.

It is a suitable substitute where patients are allergic to penicillin and in those rare instances where penicillin resistance is suspected or proved.

The disadvantages of employing chloromycetin are the same as would obtain with any drug employed orally under similar circumstances, and self-administered by patients-a possible indiscriminate use of the drug or the employment of an inadequate dosage in some cases followed by a false sense of security at the disappearance of the early symptoms.

The high cost of the drug also militates against its frequent use.

My sincere thanks are due to Dr. D. P. Sethna, Superintendant, J. J. Group of Hospitals for permission to carry out the work in the V. D. Dept. and for all the facilities offered, to my chief Dr. W. N. Welinker for his kind help and guidance, to my other colleagues in the department for their willing aid and to my laboratory technician who helped me with the laboratory work.

Grateful acknowledgements are also expressed to Parke Davis and Company Limited who generously provided the chloromycetin used in this study, and also offered facilities for the performance of culture tests in a special laboratory.

Some Common Skin Diseases With a Special Note on Their Treatment With Vioform Cream

By

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The search for an efficient agent in the treatment of the commoner skin conditions seen in out-patient practice continues. If mercurials are rarely used nowadays, pencillin and the sulphonamides have proved their worth, but have one drawback, viz., sensitisation of the skin if used for a long time. We had the opportunity of trying Vioform Cream, a product from Messrs. Ciba Limited, which contains 3% of iodochlorohydroxyquinoline, and the results obtained with this are given below. In addition to its usefulness in pyogenic infections it also possesses fungicidal qualities which enhance its value.

There follows here a brief description of common skin affections one sees in the O. P. D., with short notes on their treatment.

SYCOSIS VULGARIS

This is a chronic inflammation, chiefly of the beard and moustache region, characterised by papules and pustules pierced by hair.

***Symptoms*:**

If situated on the upper lip, its favourite site, it may be preceded by nasal catarrh, or on the beard region by *impetigo contagiosa;* on the scalp, axillae, eyebrows, or pubes, it may be preceded by an infectious eczematoid dermatitis. These precursors of sycosis should not be taken lightly and vigorous treatment should be instituted until a complete cure is obtained, otherwise the condition gradually gives rise to a papulo-pustular eruption, accompanied by severe itching, burning and tingling. The lesions are seen typically at the mouth of a hair follicle and may be capped by a thin scale of dry serum or a thick friable crust of dry pus, which when removed leaves a small crater at the opening of the hair follicle. These lesions may come in crops and in chronic cases the hair is affected, being thinned and ill-nourished. Sycosis is extremely resistant to treatment and may last for years.

***Differential diagnosis*:**

(1) ***Tinea Barbae*:** This condition rarely affects the upper lip. The lesions produced are scaly, boggy swellings, the hairs are affected earlier, being friable, ill-nourished, and lacking in lustre. Microscopic examination of the hair will reveal the fungus.

(2) ***Lupus Erythematosus*:** This is a chronic infection of internal origin distributed on the buttefly area of the face. As a rule it is covered by a sponge-like scale and shows follicular plugging accompanied by telangiectasis and atrophy. The condition is aggravated by exposure to sunlight.

(3) ***Herpes Simplex*:** Has a short duration. The lesions are vesicular; they are grouped, and there is usually a history of fever or cold.

TREATMENT

General elimination of septic foci, paranasal sinuses, teeth, etc.

***Locally*:** Ointments containing penicillin, aureomycin, chloromycetin etc.

FURUNCULOSIS

A boil usually begins as a small indurated red papule in the skin or as a small itching papule at the mouth of a hair follicle, acutely tender and gradually increasing in size. At this stage the boil may subside ("blind boils"), or it may mature and come to a head, i. e. soften in the centre, the skin eventually giving way to a discharge of pus, the 'core' being discharged a few days later. This consists of the hair follicle and the perifollicular necrotic tissue. The whole procedure takes one or two weeks. Boils are seldom single but occur in crops, usually in ill-nourished and cachectic conditions. Common sites are the nape of the neck, back, buttocks, and axilla, sites of local irritation and friction.

***Aetiology and Predisposing Causes*:**

Local irritation or pressure, lowered resistance, eczema, anaemia, alcoholism, constipation, and diabetes.

TREATMENT

Local : Fomentation, G. V., sulphonamides, penicillin, iodine, and X-ray.

General : Exclude diabetes, nephritis, scabies, anaemia. Purgatives, sulpha-drugs, antibiotics, vitamins.

IMPETIGO

An infection of superficial layers of the skin by strepto or staphylococci. The streptococcal variety starts as an erythematosus spot with a small vesicle in the centre up to about 2 cms. in size, surrounded by a broad areola. This vesicle soon ruptures and gives rise to thick yellow crusts which appear to be stuck to the lesion. These crusts are formed by the exuding serum. In the staphylococcal variety, a vesicle appears on normal skin, rapidly increases in size, and within 3 days becomes purulent. There is no surrounding areola, it is larger in size (5 cms), and there are no golden but thin varnish-like crusts. This variety is very contagious. The crusts of both varieties are easily removed by fomenting them with warm water; when the crusts are removed they leave a shallow smooth red ulcer which exudes serum. The commonest site of this lesion is on the face and it is usually secondary to ***pediculosis capitis*** or ***corporis***, scabies, eczema, seborhoea; it may be transmitted to others by the use of common towels, sponges, shaving brushes, etc.

Aetiology and Predisposing Causes :

Dirt, filth; common baths and towels; parasitic infections; low resistance and low hygiene.

Differential diagnosis :

(1) ***Tinea Circinata*** : In tinea the lesions are scaly, there is a definite vesicular border and the fungus may be demonstrated microscopically from the scrapings of the lesions.

(2) ***Ecthyma*** : More chronic duration. The crust is thicker, more often in adults, and on removing the crust a larger deeper ulcer is seen.

Treatment :

Prophylaxis,—scrupulous cleanliness in maternity wards and childrens' hospitals. Disinfection of soiled articles and isolation of infected cases.

Curative : ***Local*** : Antiseptics, sulpha, antibiotics.

General : Sulpha, antibiotics.

PUSTULAR FOLLICULITIS

Bockhart's Impetigo is a staphylo-perifolliculitis of the pilo-sebaceous glands, the favourite sites being the extremities.

Symptoms :

This is an extremely resistant form of folliculitis. It is similar to ***sycosis barbae*** in its appearance, but differ from it in its distribution. It may be preceded by an infected wound, an eczema, or repeated applications of strong

ointments containing tar or mercury. It starts as a papular or pustular eruption which is extremely itchy and painful and due to chronic itching the skin may become lichenified. The infection spreads rapidly to other hair follicles.

Aetiology and Predisposing Causes

Poor hygiene, low resistance, infection with staphylococci.

TREATMENT

Local: Antiseptics, antibiotics.

General: Sulpha, antibiotics, vitamin A, vaccines.

INTERTRIGO

This is a streptococcal or a fungal parasitic infection causing maceration, erythema, itching and burning. The usual sites are those which are subjected to warmth, moisture and friction, e.g. retro-auricular folds, axillae, groins, umbilicus, submammary folds in women, natal cleft. The affected areas are erythematous and inflamed, the overlying skin is macerated, there may be erosions, fissures and oozing accompanied by severe itching and burning.

Aetiology and Predisposing Causes:

(1) Parasites, monilia, tinea; (2) streptococci; (3) obesity; (4) poor hygiene.

TREATMENT

Local: U. V. R., dusting powders;

General: Dietetic.

EPIDERMOPHYTOSIS

Athlete's foot, tinea pedis: An invasion of the cornified layer of the dermis by the species ***Trichophyton*** and ***Epidermophyton***.

SYMPTOMS

These may be classified as acute, subacute and chronic. The acute eruption is vesiculo-bullous with the character of a vesicular eczema and dyshidrosis. The vesicles are deep-seated and, when ruptured, exude a thick fluid; if they are secondarily infected, a purulent material can be expressed. In very acute cases, grouping of the vesicles occurs with the formation of bullae. The distribution is between the toes or on the soles of the feet. The subacute lesion following the acute lesion, consists of white sodden tags of epithelium between the toes, accompanied by severe itching and burning. The chronic variety is characterised by hyperkeratotic lesions consisting of irregular masses of overgrown cornified epithelium. These fungal infections are contagious and are transmitted by use of common bathrooms, swimming pools and by towels, socks and shoes.

Aetiology and Predisposing Causes:

Epidermophyton, warmth, moisture, poor hygiene.

Differential Diagnosis:

(1) ***Dermatitis***: History of contact, with a more rapid development. No fungus can be demonstrated microscopically or by culture.

(2) ***pustular Psoriasis***: Deep-seated pustules on soles, usually sterile. Specific distribution–more on extensors. Mica-like scales.

(3) ***Acrodermatitis***: Usually unilateral; starts as an infected paronychia or infected wound.

(4) ***Bacterial***: No fungus can be demonstrated and pus clears up on removal of septic foci.

(5) ***Pyodermatitis:*** Secondary to an infected wound.

ACRODERMATITIS PERSTANS

A pustular infection of the hands and soles usually beginning as an infected paronychia or infected sore.

SYMPTOMS

A form of pyogenic dermatitis characterised by flat, yellow, sterile pustules occurring below the ***stratum corneum*** and accompanied by a moderate amount of discomfort. The pustules heal by exfoliation, while fresh ones continually appear. A very persistent infection, ultimately becoming crusted, eczematised and psoriasiform.

Differential Diagnosis:

(1) ***Pustular psoriasis***: Other symptoms of psoriasis with specific localisation

(2) ***Eczema***: More superficial; vesicles predominate, patches of eczema elsewhere.

TREATMENT

Local: Keratolytics, antiseptics, sulpha, antibiotics.

General: Sulpha drugs, antibiotics, elimination of septic foci.

INFECTIOUS ECZEMATOID DERMATITIS

An eczematous eruption secondary to a pyogenic infection, e. g. a discharging abscess, sinusitis, otitis, ulcer etc.

SYMPTOMS

A vesicular, pustular, crusted, dry and scaly or a multiform eruption with an erythematous base, produced by hypersensitivity of the skin to bacterial or chemical agents. In mild cases the lesions are dry and scaly. In acute cases the face and extremities are oedematous and there may be diffuse pustulation and vesiculation. The affected areas ooze and the patient is in acute discomfort.

Aetiology and Predisposing Causes:

(1) Abscesses, chronic ulcers, otitis, fistulae, discharge from eye and nose, chemical irritants.

TREATMENT

Local: Emollients, antiseptics.

General: Antihistaminics, sulpha drugs, antibiotics.

SEBORRHOEIC DERMATITIS

Seborrhoeic Eczema : An eczematous condition of the skin caused primarily by ***pityrosporum*** and secondarily infected with staphylococci and streptococci.

Sites : Scalp, forehead, face, chest, axillae, posterior part of neck, pubis, groins, navel.

Symptoms :

If the scalp is affected, it becomes swollen and red, and oozes profusely, causing tbe patient's pillow to be soaked with serum at night, or the hair to be matted. In chronic cases due to secondary infection with streptococci or staphylococci, a further folliculitis often develops on the forehead. It forms a red margin on the hair, the "corona seborrhoeica". In other areas, axilla, umbilicus, groin, etc., it is characterised by an erythematous weeping surface with outlying red follicular papules on the neighbouring healthy skin. In very severe cases, the whole body may be affected.

Aetiology and Predisposing Causes :

Pityrosporon : With staphylococci and streptococci; moist, greasy skin; warmth, sedentary occupations.

Differential Diagnosis :

(1) ***Impetigo*** : Lesions are localised, usually accompanied by Pediculus capitis. On removal of the crust, the edge of the original blister may be visible.

(2) ***Irritant Dermatitis from Hair Dye*** : History or application of a patch test helps in diagnosis.

(3) ***Intertrigo*** : Does not show a margin of red follicular seborrhoeic papules and is not so widespread.

(4) ***Tinea*** : Usually affects groins; rapid spread; vesicular border more acutely inflammed; microscopic demonstration of tinea.

(5) ***Flexural Psoriasis*** : ***Characteristic distribution of mica—like scales***: uniform smooth red surface with sharp edges; histological section.

(6) ***Besnier's Prurigo*** : History of persistent infection from childhood. Symmetrical lesions with areas of lichenification.

TREATMENT

Local : Sulphur emollients, mercurials;

General : Vitamins, antihistaminics, diet, outdoor life.

TINEA CRURIS

An erythematous scaly eruption in the groin, accompanied by severe itching.

SYMPTOMS

Begin as red papulo–macules which gradually spread peripherally forming raised erythematous plaques several inches across. The periphery is more inflamed

than the centre and may be vesicular or pustular. The irritation is acute and is usually on the inner side of one or both thighs. It often extends backwards into the perineum and anal cleft. It may affect the axillae or the skin under pendulous breasts. It is spread directly by infected linen or water-closet seats and generally by infected feet via bath-mats, wet floors or bathrooms, etc; once the feet are infected, it is transferred to the groins by the towel.

Differential Diagnosis:

(1) *Seborrhoic dermatitis, Intertrigo, Flexural Psoriasis*: These can be excluded by microscopic demonstration of the fungus and the well-defined vesicular or pustular border.

TREATMENT

Local: Application of iodine, Whitfield's ointment, anthralin, cignolin, derobin, etc.

TINEA VERSICOLOR

Varieties: *Tinea nigra, tinea alba, tinea flava*: The disease occurs on the upper part of the trunk as a rule. The patches or sheets it produces may be of varied colour, yellow, black, or white, depending on the patient.

SYMPTOMS

The symptoms produced by this infection may take the form of itching or else cause no discomfort at all. The affected skin is slightly wrinkled and, when curetted, fine scales can be seen from which the causative organism can be demonstrated *(microsporon furfur)*.

Differential Diagnosis:

(1) *Leucoderma*: In leucoderma there is no scaling and the patches are dead white.

(2) *Lepra*: In the maculo-anaesthetic type there is loss of sensitivity and no scaling.

TREATMENT

Local: Fungicides, anthralin, derobin, etc.

After this description of the common skin affections found in the daily practice at Out-Patient-Departments, we would like to give now our results obtained with vioform in the treatment of various pyogenic, fungal and mixed-infections of the skin. We used topical applications of a cream containing 3% iodochlorhydroxyquinoline prepared by Ciba-Pharma Limited. We treated at the O. P. D. and in the skin wards of the K. E. M. Hospital, Bombay, 200 patients suffering from pyogenic and fungal infection. Our results are summarized in the following table:

RESULTS OF THERAPY

Diagnosis	No. of cases	Cured	Improved	No change	Worse
Sycosis Vulgaris	30	19	9	2	–
Pustular Folliculitis	20	12	3	5	–
Impetigo	45	38	7	–	–
Furunculosis	18	10	3	5	–
Tinea Cruris	9	3	2	4	–
Epidermophyton	5	2	2	1	–
Infectious Eczematoid Dermatitis	52	35	12	4	1
Seborrhoeic Dermatitis	10	4	3	3	–
Acrodermatitis	6	4	2	–	–
Tinea Versicolor	5	3	1	1	–
	200	130	44	25	1

Among the 200 cases treated with vioform-cream, 130 were cured clinically and showed no signs of relapse for 2 months after the end of the treatment. Unfortunately, no further follow-up was possible. This 65% rate of cure indicates that vioform has a definite antibacterial and antifungal action. Of added importance is the fact that none of the patients developed sensitivity to the drug. As many drugs are known to be useful for the treatment of pyogenic and fungal infections of the skin, (penicillin, sulphonamides, ammoniated mercury, iodine, sulphur, salicylic acid, resorcin, tar, acriflavin, gentian-violet), we observed nevertheless that vioform was superior to any of these drugs; its action was rapid, it produced no sensitivity, no staining, and moreover the base in which it was incorporated was preferred by patients as it was not messy and was easily removable. Observations carried out by various workers *in vitro* have shown that vioform is a very effective antibacterial and antifungal agent. However, we would like to emphasize that in vivo as well as in vitro vioform is in our clinical trials effective and remarkably well tolerated by the human skin. In the light of very low toxicity of iodochlorhydroxyquinoline-which is also extensively used as Entero-Vioform in the treatment of amoebiasis and trichomonal infection-it may be stated here that vioform is also an absolutely safe preparation for local use. No symptoms of iodism were observed, even after prolonged treatment. However, it is safer not to use it over too extensive areas or on those who are sensitive to iodine.

SUMMARY

Vioform cream has a definite antibacterial and fungicidal action. It is well tolerated by the human skin, even in irritated conditions. It produces practically no hypersensitivity. Its non-messy application produces no staining or sticky discomfort. A treatment with vioform cream cleared up a variety of dermatitis resistant to other form of therapy; it is therefore our impression that vioform cream is equal, if not superior to most of the other drugs used for these affections.

FOOTNOTE

Our cases were treated at the K. E. M. Hospital. My thanks are therefore due to the Hon. Dermatologist, Dr. J. A. Fernandez, who took a personal interest in this trial, and to the Dean of the K. E. M. Hospital, Dr. G. Dhayagude, for permission to publish the results. My thanks are also due to Ciba Pharma Limited for the liberal supply of vioform cream given to us for trial.

Granuloma Venereum

(Also called "Granuloma Inguinale" " Ulcerating Granuloma of Genitalia ")

By

T. R. KAPUR, L. C. P. S., Faizabad

It is a contagious and infectious venereal disease which causes chronic local destruction of the tissues around the genitalia and adjacent areas. It is characterised by progressive, indolent, serpiginous ulcerations.

It is caused by short, gram negative, "Klebsiella granulomatis", or Donovan body; and is contracted, generally through sexual intercourse. The disease is usually confined to the genitalia, but it may occur on the lips, nose or face. It occurs in both sexes and is common among the coloured races in the tropics.

2 to 8 days or a little longer in some cases, after the exposure, the lesion begins as a vesicle, papule or nodule on the penis in males and labia minora in females. The lesions progress and ulcerate, exposing the subcutaneous tissue from which exudes a peculiar foul smelling, thick, purulent discharge.

From the genitals, the ulcerations extend to groin and medial surface of thigh, vagina, perineum, and peri-anal regions. Cicatrization of old lesions occurs, as the disease extends further. There is generally no pain or itching. Lymph glands are generally not enlarged. General health remains unimpaired.

Diagnosis : A history of exposure in endemic areas, appearance of lesions and offensive smelling discharge are sufficient for a clinical diagnosis.

It can be differentiated from carcinoma by the unusually long history and absence of lymphatic involvement and cachexia.

From syphilis, it can be distinguished by the Wasserman reaction and response to anti-syphilitic drugs.

From tubercular ulcerations, it can be eliminated by absence of tubercles and giant cells.

Treatment: Until recently antimony and its preparations-anthiomaline, foudine etc. were the principal drugs employed in treatment. These cured a good number of cases. But recently antibiotics have completely changed the out-look. Aureomycin, chloromycetin and terramycin are now the "drugs" of choice. A cure can be expected in 10 to 15 days. Penicillin, of course, has no effect.

References: (1) Diseases of the skin.....Andrews.
(2) Seminar International.....Vol. 1. No. 1.

CASE NOTES

A Case of Acute Disseminated Lupus Erythematosus

By

T. N. MATHUR, M. B. B. S., D. T. M., C. M. S.,
Assistant Bacteriologist, Government of Punjab, Karnal

Cases of Acute Disseminated type of Lupus Erythematosus are rare. Roxburg (1950) reports of having come across only 10 cases. The following case is therefore reported.

U. a girl aged 8 years was seen on 7.6.'52 with the following complaints.

(1) Extreme restlessness—duration 5–6 days.
(2) Swelling of the face, legs, thighs and the waist—duration 15 days.
(3) Fever, one month.
(4) Rash on the face, 4 weeks.

History of Present Illness: On 1st May, 1952 patient had stomatitis involving the tongue and the buccal mucous membrane, making it difficult for her to take her meals. Then she had conjunctivitis and kept her eyes closed due photophobia. This lasted 6 days. She had simultaneously flushing of the face. On the 6th May she started getting fever which used to be more at night than during the day. The state remained for about a week. On the 15th May she had erythematous eruption on the face which later appeared on the back of the elbows, forearms, wrists, knees and front of legs. The doctor who was attending diagnosed her to be suffering from measles. On the 20th May another physician was consulted who also thought that the case was one of measles. He prescribed sulphatriad one tablet t. d. s. This was given for 5 days. The fever subsided but the rash remained, and she felt better, but on the 27th May her eyes got swollen so that she could not open them.

She was now suspected to be suffering from nephritis but her urine when tested showed no albumin. She was now put on penicillin injections. On 1st June the right arm became swollen. On the 2nd the left leg was swollen and on the 3rd both forearms and legs were involved. The fever was still 99.4 F. On the 4th June she started having pain in the right elbow, the right knee joint and and in her limbs. On the 7th June she was very restless and could hardly sleep at all. Now the swelling appeared on the dorsum of both the feet and the waist.

Past illness: Nil, except 4 days fever in February, 1952.

Family History: Parents were married 15 years ago. In 1937 the mother gave birth to a premature 7 months baby who died. In 1940 she had a son who is living and is healthy. In 1942 she had a daughter who died 3 days after birth. In 1944 patient was born. In 1945 she had 3 months abortion. In 1946 she had a son who also died 3 days after birth. In 1947 she had a

daughter who died at the age of 6 months. In 1951 she had an abortion at 3 months. There was no history of syphilis in the parents.

Physical Examination: A child of average built and development, she was very restless, eyelids were swollen. There was erythematous rash on the face, there was oedema of the lower part of the abdominal wall, legs and forearms. Movements of the right wrist, right elbow and right knee were painful. There was erythematous rash with a central black dot on the elbows, back of forearms and front of legs. Liver was enlarged 4 fingers below the costal margin. Spleen was not palpable. Pulse rate was 132 per minute and the temperature 101°F. The child was very irritable and physical examination was done with difficulty.

Laboratory Examinations:

Urine showed no abnormality.

T. L. C. 6,200

D. L. C. :—

Polymorphonuclear leucocytes	64%
Lymphocytes	19%
Large mono-nuclears	14
Eosinophils	3

The E. S. R. and the albumin globulin ratio could not be done because the parents did not agree to any further interference with the child. Kahn test was negative in the parents. Ten months later Kahn test was done on the patient's blood but was negative.

Diagnosis: There was no difficulty in diagnosis due to the typical features namely, fever, rash, arthralgia, body pains and swellings—all coming on acutely. The rash of measles does not persist so long, and other features, e. g. arthralgia and swellings are absent in measles.

Treatment: The case was put on Mist. diaphoretic and soda salicylas, with sedatives at night, but as she did not get better, the parents were advised to have injections of A. C. T. H. for the child. The drug being costly this treatment was refused and not finding the patient responding to conservative treatment, they changed treatment, and consulted some local Hakim. The child remained under his treatment for about 6 weeks. The swellings became more pronounced so much so that the whole body was swollen. She received 4 injections of mersalyl. The first injection produced good diuresis, but the subsequent injections produced less and less effect till with the last injection there was no diuresis, but the patient felt better after these injections. She remained very weak and was very much reduced till the end of July but was alright by the end of September. She was ultimately cured, and is now healthy till about ten months after the beginning of her illness.

Follow up: Dated 19.3.'53.

The child is healthy; Liver was 2 fingers below costal margin; Spleen not palpable.

Total Proteins	...	...	...	...	6.174 gm. %
Albumin	...	...	...	...	4.322 gm. %
Globulin	...	...	...	...	1.852 gm. %
Alb./Glob.	...	...	...	...	2.3/1

***The case presented the following interesting features*:**

(1) The disease is reported to affect young adult women. This case was in a child aged 8 years.

(2) Cases are usually fatal. This case survived.

(3) Acute disseminated lupus erythematosus appeared as such and not from a previous patch or from chronic form.

(4) The child had extreme restlessness.

(5) The family history is interesting in that her monther's mother suffered from rheumatoid arthritis which like disseminated lupus erythematosus is also a collagen disease and that out of 8 conceptions that her mother had only 2 children lived to an age above 6 months, there being 2 abortions, and one miscarriage. My thanks are due to the Director of Health Services, Punjab, for kindly allowing me to publish this case.

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Christian H. A. — Principles and Practice of Medicine, Sixteenth Edition, D. Appleton Century and Co., New York.

A case of Lupus Erythmatosus treated with Mepacrine

By

J. G. SHROFF & NARENDRA * Bombay.

A. G. a Muslim male aged 24 years, was admitted in the Skin Wards of Sir J. J. Hospital, Bombay on 17-12-1952 with the following complaints.

1. Erythmatous and scaly lesions over the lips, back of the right ear and upper part of the back. Lesions were itching.

2. Giddiness and headache while walking in sunlight.

The patient was well ten months back. About six months ago he started getting giddiness and headache while walking in sunglight. Patient developed

* From the Dept. of Dermatology, Grant Medical College, Bombay.

scaly lesions on the back of the right ear and back. There were soreness of the lip. The lesions were moderately itching. He was treated as an indoor patient for sometime and was discharged when he was relieved.

Recently the lesions had flared up again and so the patient was readmitted for the treatment.

Family history : Father and mother died of pulmonary tuberculosis. No history of syphilis in them.

Personal history : Occupation–Mill hand. Diet mixed. Habits–simple. Bowels–regular. Sleep–good.

General Examination : Well built, fairly nourished skin and conjunctivae pale. Teeth carious, broken and some missing.

Systemic Examination : R. S., C. V. S., G. I. S., C. N. S., U. G. S. N. A. D.

Local Examination : Oval erythematous raised patches on the lips, back of the right ear and on the upper part of the back. Excoriations and moderate thin discharge present. Patient complained of moderate itching.

Treatment : Mepacrine 0.1 gm. t. d.s. 12 Inj. Vit B_{12} 50 mcgm. on alt. days. Mist. Ferri et. Ammon. citras. oz. zi. t. d. s. Ung. Quinine Sulph. 2% locally. Extraction and required treatment of the decayed teeth.

Progress of the case : After ten days of the treatment the patient started feeling better. Itching and the pigmentation was markedly reduced. The weakness and giddiness took longer time to clear. At the end of one and half months of treatment the skin condition cleared completely.

During his stay in the hospital the patient also complained of pain in abdomen. The barium meal screening of the stomach and duodenum revealed chronic duodenal ulcer with deformity of the duodenal cap. He was treated with alkaline belladonna mixture and high protein diet which relieved him completely.

Discussion : Following the report of an article published in Lancet October 1951 we tried mepacrine in the above case. No serious toxic manifest -ations were met with. The response to treatment was remarkable considering the fact that the disease is slow to respond to other accepted forms of therapy.

Our thanks are due to Dr. W. N. Welinkar, M. R. C. S., F. C. P. S., J. J. Group of Hospitals, Bombay, who very kindly gave permission to publish this case.

KNOWLEDGE FROM WORLD CONTEMPORARIES

The Use And Misuse of Dermatologic Prepapations

It is the purpose of this article to outline a rational approach to dermatologic therapy and to demonstrate that good dermatologic therapy can be practiced with a surprisingly few, simple preparations. In prescribing for skin diseases, the type of the skin eruption, the classes of dermatologic preparations, and the physiologic actions of drugs on the skin must be taken into account.

THE TYPES OF SKIN ERUPTIONS

Like every other vital organ, the skin reacts to injury in a variety of ways and in a succession of stages. Skin eruptions may be exudative, vesicular, pustular, crusted, scaling, or thickened (lichenified) in the order of their increasing dryness or chronicity. The same skin disease, in different stages, may present itself as any of the types of eruptions mentioned. For this reason the general practitioner should think more of treating types of eruptions and less of treating specific skin diseases.

THE CLASSES OF DERMATOLOGIC PREPARATIONS

Before discussing the physiologic actions of drugs on the skin and some of the simpler drugs which can be prescribed to complish these actions, it is necessary to understand something about the various classes of dermatologic preparations in which these drugs may be dispensed. These are soak, lotion, paste, cream, ointment and powder. It is as important that a drug be dispensed in the correct class of preparation as it is that the correct drug be used.

The *Soak*, or wet dressing, is the basic dermatologic preparation. Soaks are cleansing, soothing, mildy antiseptic and antipruritic. They maintain drainage of infected areas and are excellent agents for relieving superficial inflammation. The indications for soaks—or baths, if the eruption is generalized—are the acute inflammatory, exdudative or vesicular eruptions such as vesicular or pustular eruptions of the hands, secondarily infected dermatophytosis of the feet, and rhus dermatitis. Infected or pustular lesions should be treated with warm soaks and the contact type of dermatitis should be treated with cool soaks. The best soak probably is Burow's solution which can be made in a 1 : 20 dilution by dissolving 1 domeboro tablet in 1 pint of water.

Lotions are suspensions of powders in a water or water-alcohol base. They primarily are drying and therefore antieczematous. They can carry a great variety of active medications. In general, the indications for lotions are the acute exudative dermatoses, and they usually are prescribed in combination with soaks. Examples of the indications for lotions are blistering sunburn, contact dermatitis, or eczematised tinea cruris. Because they are suspensions, these preparations require frequent shaking to redisperse the solid agents which have settled in standing. Therefore, they are commonly called "shake lotions." A

simple shake lotion is one consisting of 15 percent zinc oxide, 15 percent talc and 10 percent glycerin in water.

A ***paste*** is a solid suspension of a powder in an ointment type of vehicle. Pastes are much more adherent to the skin than lotions and therefore more protective. The indications for pastes are the subacute or chronic dermatoses, those of a more chronic inflammatory character, and those in which free drainage does not have to be encouraged. Pastes are used in subacute contact dermatitis or in any eczemas which are no longer weeping or vesicular. As with lotions, a great variety of active medications may be incorporated in pastes. The simplest is Lassar's paste which consists of equal parts of zinc oxide and starch in petrolatum.

Creams are water-in-oil or oil-in-water vehicles of a solid consistency. They are much more penetrating than the vehicles previously mentioned and are used to provide intimate contact between the active agents and the skin. They are useful in subacute or chronic dermatoses, especially crusted eruptions such as the lesions of impetigo. As base for creams, ointment base, water soluble is effective.

Ointments are solid preparations with a fatty base. Although there are definite indications for ointments, they are too often prescribed when some other class of preparation would be more useful. They are lubricating, very penetrating, and are effective in removing scales. They are indicated in the chronic, dry, scaling, or thickened eruption. They can be used, for example, in the dry, scaling type of dermatophytosis, or in psoriasis. Whereas lanolin and petrolatum formerly were the bases for dermatologic ointments, these have been supplanted in the last few years by the higher fatty alcohols. Too many patients were sensitive to wool fat and too many could not tolerate the friction and the soap required to cleanse the skin of petrolatum. Hydrophilic ointment is an effective and easily removed ointment base.

Powders are primarily lubricating and are used to combat friction. They generally are used in the intertriginous areas when there is no acute exudative process.

THE PHYSIOLOGIC ACTIONS OF DRUGS ON THE SKIN

In every branch of medicine a drug is prescribed for its physiologic action on the body. This principle seems to be lost sight of only in dermatologic therapy. Here we all too often find physicians prescribing local medication for the skin with no clear idea as to what specific action they want to accomplish or what the medication can accomplish. Medications applied to the skin may be protective, soothing, antipruritic, antibacterial, antifungal, antiparasitic, keratolytic, or corrosive. A simple therapeutic arsenal, built on the basis of intended action in the skin, can be outlined as follows:

Protection and soothing. When we prescribe a medication for these effects we signify that we do not expect the medication to do anything to the skin beyond relieving the symptoms of irritation and protecting it against further injury. In doing this, we permit the skin's reparative processes to operate and often no further, more active, medication is required. This is especially true in acute contact dermatitis, in which the aim of therapy is to discover and remove the offending substance and to protect the skin from further damage until it can regenerate. The class of preparation used to effect the protection and soothing will depend on the wetness or dryness of the eruption. In a very acute, oozing, inflamed dermatoses, protection and soothing can best be achieved by interrupted wet dressings of Burow's solution in a 1:20 dilution. A somewhat less exudative process can be treated with less frequent wet dressings, alternating with a lotion. For the subacute, drier eruption a paste, such as Lassar's paste, is indicated. We can continue across the scale to a chronic, dry, scaling eruption for which an ointment would be indicated,

Antipruritic. Pruritus is not nearly as common as is supposed, but when present a thorough investigation to determine the cause should be made. Many antipruritic drugs achieve their effect at too high a price. Some are extremely irritating; others are highly sensitizing. Among the latter are the cocaine derivatives. About 10 percent of patients using these substances develop a sensitization, whether or not it is manifested by an immediate contact dermatitis. Sensitization to a cocaine derivative is a real disability in this age because of possible cross sensitivity to related compounds of the para-amino-benzoic acid nucleus.

The possibility that the patient may not be able to obtain the benefits of procaine anesthesia from the dentist, may not be able to take sulfonamides, or may become sensitive to paraphenylenediamine, a basic dye substance, must be considered before a surface anesthetic is prescribed. The safest and most satisfactory antipruritic is menthol. It is prescribed in a 0.25 percent strength, the class of preparation depending on the type of eruption being treated. Thus for an acute, itching rhus dermatitis it could be prescribed in a lotion, but for a chronic, thickened pruritic patch of neurodermatitis a hydrophilic ointment base would be preferred.

***Antibacterial*:** Pyogenic infections of the skin are common, either as primary pyodermas or, more often, as secondary infection of other dermatoses. There are innumerable antibacterial preparations for use on the skin, but many of them are extremely sensitizing or irritating. An effective antibacterial agent for general use is 3 percent vioform in ointment base, water soluble. Warm Burow's solution soaks or wet dressings should be used until the eruption has subsided to a degree that an antibacterial cream is indicated.

Antifungal: The injudicious use of fungicides probably causes far more disability than do fungus infections. An added irony is the fact that many dermatoses unskillfully treated with fungicides are not fungus infections at all. Actually fungi are responsible for a relatively small percent of all skin diseases and those which are truly fungus infections can be confirmed by simple laboratory tests. Fungi in the skin can cause eruptions that run the gamut from acute exudative eruptions to dry, scaling, hyperkeratotic plaques. The therapy depends on the type of eruption. The exudative types, which are common, should be treated only with soaks, preferably a 1:20,000 solution of potassium permanganate. After the the acute exudative process has subsided a more specific fungicide may be used. The most practical one is fungicidal ointment.

Antiparasitic: The most common skin parasites are the scabies mite and the pubic louse. Fortunately, the gamma isomer of hexachlorocyclohexane is effective against both. Commercially it is known as gammexane or lindane. It is best employed as a 1 percent lotion. Unlike sulfur and benzyl benzoate this is not irritating to the skin and, in the treatment of these infestations, only rarely is more than a single application required.

Keratolytic: Agents are indicated in dry scaling lesions in which it is desired to reduce the thickness of the skin. They, like the fungicides, can cause great damage if not properly used. They should never be used on exudative vesicular, or inflamed lesions. The most common and the safest keratolytic is salicylic acid. It is usually dispensed in an ointment base because the eruption to be treated is the chronic, dry, thickened type. It may be prescribed in a strength of from 3 to 10 percent, depending on the thickness and the location to be treated.

Corrosive: Agents are used to destory tissue or abnormal growths. Althouh they must be used with caution, they can be used with a fair degree of safety on venereal warts. The agent most commonly used for these lesions is 25 percent podophyllum resin in tincture of benzoin. This has a selective action on the warts only and though irritating to the normal skin, does not permanently damage it. Under this therapy, most venereal warts melt away after 2 or 3 applications.

That completes the dermatologic pharmacopeia, built on the basis of the desired effect on the skin. The only drugs or compounds mentioned were: (1) Burow's solution, (2) zinc oxide lotion, (3) Lassar's paste. (4) ointment base, water soluble, (5) hydrophilic ointment, (6) menthol, (7) vioform cream, (8) potassium permanganate, (9) fungicidal ointment, (10) salicylic acid, (11) gammexane, and (12) 25 percent podophyllum resin in tincture of benzoin. The average physician, not trained in dermatology, could probably practice much better dermatologic therapy with these few preparations than he could with twice or 10 times as many.

DERMATITIS DUE TO OVERTREATMENT

Overtreatment dermatitis is a dermatitis venenata due to medication applied externally. It may take the form of a reaction ranging anywhere from a mild vesicular eruption at the site of application to a generalized fatal exfoliative dermatitis. The initial eczematous response will be at the site of application of the offending substance, but from there it may spread to any or all areas of the skin if sensitization occurs. This bizarre behaviour of the skin is difficult for the average physician to understand and, for that reason, he is loath to accept the explanation offered. He is more inclined to think that the original dermatoses, for which he applied the medicine, has spread to another location and his remedy for that is more of the same ointment. Each application of the offending medication results in a progressively more severe dermatitis.

Contact dermatitis due to medication is a primary cause of disability in skin diseases. Most consulting dermatologists say that the majority of the patients they see have been overtreated and that they must use bland nonspecific therapy for from 7 to 10 days either to allay a superimposed contact dermatitis or to discover what the basic condition really is.

The prevention of contact dermatitis due to locally applied medication involves: (1) the use of simple drugs of low sensitizing potentiality such as the 12 preparations listed above: (2) the avoidance of most proprietary compounds, which are usually a mixture of many, and sometimes mysterious, substances and (3) a constant alertness for the appearance of contact dermatitis due to treatment and a willingness to change the medication as soon as this appears.

William R. Walsh, U. S. Armed Forces Med. Jn.,
Vol. IV, No. 4, April 1953, Pp. 563.

Ear, Nose and Throat Manifestations in Leprosy

1. Seventy three cases of leprosy were examined in Nanchang Leprosy Sanatorium and the findings of the ear, nose and throat were analyzed.

2. Male patients were predominent in this series, the male to female ratio was 5:1. More than half of the patients were between the ages of 20 and 40 years, and 76.71 per cent of the patients were natives of Kiangsi.

3. The patients were roughly divided into neural and lepromatous types according to their clinical manifestations and the type-distribution was about equal.

4. In the order of frequency, attacks of epistaxis and nasal discharge, impairment of hearing, tinnitus, sore throat and hoarseness of voice were the common symptoms especially among the lepromatous group.

5. The ear, nose and throat changes were common in the lepromatous group of patients and the nose was particularly affected. When the nose was heavily involved the ears and throat were rarely exempted.

6. Besides the changes of mucous membranes and soft tissues, involvement of the superficially placed cartilages as the auricular cartilages, alar and septal cartilages of the nose and the epiglottis were very common.

7. There were 20 patients (27.39 per cent) with auricular involvement, 29 patients (39.72 per cent) developed thickening of the tympanic membrane. Fifteen patients (20.54 per cent) complained of impaired hearing either of the conduction type or of perceptive nature. The thickening of drum heads and conductive deafness are probably due to the affection of Eustachian tube from nasal or nasopharyngeal infections. Nerve deafness can hardly be explained by the leprosy itself, because involvement of the eighth cranial nerve in leprosy is extremely rare. Probably degeneration of the end-organs in the inner ear or vitamin deficiencies may play some role in causing the nerve deafness.

8. The changes commonly found in the nose were atrophic changes of nasal mucosa (47.49 per cent), telangiectasis of the anterior naris (32.89 per cent) and depression of the nasal bridge (19.70 per cent). In some cases, there was loss of hairs of the vestibules. Telangiectasis of anterior naris and loss of vibrissae are rarely described in the literature. Not a single case of bony destruction could be found, so saddle nose resulting from leprosy was usually confined to the lower part of the nose.

9. Less changes were found in the pharynx in our series. The pharynx looked paler and the lymphoid structures including tonsils and pharyngeal lymphoid follicles were hypertrophied but less frequently in lepers as compared with the general population.

10. Epiglottis was the laryngeal structure commonly involved (50.68 per cent). The usual finding was thickening of the epiglottis. In a small number of cases, the arytenoid process and vocal cords were also thickened. Ulceration was very rare and one laryngeal stenosis was noticed in our series.

The Chinese Medical Journal, Vol. 70, Nos. 7-8, July August 1953, Pp. 289.

A Study on Diagnosis and Treatment of Congenital Syphilis in Babies Under four Years

The most common findings as we see them coming for treatment are as follows :

1. Epiphysitis (called 'Gathwan Ghao' in Chhattisgarh) is the most common manifestation of congenital syphilis affecting the elbow, knee, ribs, sacrum,

wrist, ankles, skull, shoulder, hip, fingers and toes. Periostitis frequently develops independently or is an extension of the epiphysitis. Suppuration is a common complication of these swellings.

2. Erysipelas like eruption over the chest, abdomen, neck and back during the first ten days after birth are very frequent. These sometimes suppurate down along the muscles layer and large areas will be undermined. These babies are usually very sick but immediate treament with penicillin will usually heal them up.

3. Superficial skin eruptions with blebs that break come most frequently in the first week and may affect large areas of skin. This appears mostly on the abdomen, chest or back; the neck, arms and legs may sometimes be affected. It is almost like a 2nd degree burn and usually heals quickly with no apparent scar.

4. Sores or fissures around the mouth or anus with anemia and scrofula. This can come early but more frequently it comes after six months or a year. The nasal bones may be affected.

5. Distension of the abdomen with or without an enlarged liver. Often this is an affection of the intestinal tract and results in gaseous distension with ilius and constipation which may at times be like an intestinal obstruction. We have treated these distensions successfully with prostigmine. Livers are very frequently enlarged but jaundice is very rare. The percentage of deaths in this group is high. The practice among Chhattisgarhi mothers of violently massaging the baby's abdomen until it has a bowel movement is very damaging to these cases. Dr. Moore of Johns Hopkins University gives the following as symptoms that should be thoroughly investigated before eliminating congenital syphilis.

'(a) Puny, illnourished, wizened, won't gain, infants
(b) Skin rashes of any type
(c) Snuffles
(d) Pseudoparalysis'.

I am very much surprised that he has not mentioned our 'Gathwan Ghao' which we will find is the most common manifestation of early congenital syphilis here in Chhattisgarh.

We have not observed cases that we considered to be syphilis of the central nervous system but it is possible that it be present and the symptoms masked with sleep and inability of the baby to take its milk. This needs further and careful study.

Our proccedure has been to admit these babies wherever possible and start penicillin injections every three or six hours, the averge dose of two lakhs per day, a total dosage of 1,600,000 to 2 million units. Twice weekly they receive small doses of .01 disulpharsan and 1/16 gr. of bismuth. Suppurating abscesses

are opened and dressed with chlorine solution. Other medications are symptomatic.

The average stay in the hospital was 11½ days in which babies received an average of 1,628,000 units of penicillin. This gave the following results: 62 babies went home improved, 8 died and 2 left before any improvement was noticeable.

Certainly for years these symptoms in babies have been treated as if they were syphilis, with very good results. In studying the literature one is impressed with the ease with which the unfortunate syphilitic baby could have been spared the disease had the parents just known that twelve arsenicals with bismuth or eight days' treatment with penicillin would have given them a healthy baby so far as syphilis is concerned.

I would like to outline recognized anti-syphilitic treatment for a pregnant mother. The diagnosis is made by a blood test (Kahn or Wasserman) or on the history of a previous syphilitic baby either living or dead. Previously where it is indicated the pregnant mother is started out with a small dose of either mapharside .03, or neo-salvarsan. 3 intravenous, and is also given gr. 1 of bismuth salicylate intramuscularly. Calcium lactate is given to be taken by mouth. The patient is requested to return weekly and the dosage of mapharside is stepped up to .045 of a gram. Bismuth is kept at gr. 1 per injection. This is given for 12 weeks of the pregnancy preferably starting at the 3rd or 4th month. The actual cost of this medicine in a clinic comes to about Rs. 8. If the patient will consent to remain in the hospital for eight days, then penicillin G 50,000 units every three hours is started and is run for eight days, or six lakhs of penicillin in an absorption delaying vehicle given daily for eight days is sufficient to guarantee that 90 per cent of syphilitic mothers will have a healthy baby. The one requirement for the penicillin is that it be a standardized preparation capable of giving definite blood and tissue level for 192 hours or more. In this time the treponema that are free to enter the foetal circulation are eliminated. The cost to a hospital for this would be about Rs. 12.

The Jn. of Christian Med. Assn. Vol. 28, No. 2, March 1953, Pp. 70.

INTERNATIONAL PROGRESS IN COMBATTING VENEREAL DISEASES

Venereal Disease Contact Investigation

The control of venereal diseases among military personnel is a joint function of military and civilian authorities. A military program aimed at the prevention and control of venereal diseases will be effective only to the degree of joint participation of the civilian and military partners. Each group must assume

responsibility in certain areas, but the program should be integrated in its conception and execution. A brief review will delineate the areas of responsibility of both the civilian and military authorities.

Military Program:

The activities of the armed forces may be conveniently divided into two phases-the program for prevention and the program for control of the venereal diseases.

PREVENTIVE PROGRAM

1. Education. The objective of this part of the program is not only to motivate the individual serviceman to avoid exposure but also to strengthen and reinforce his belief in the fundamental truths of decency and morality, to the end that he may retain his own self-respect, attain a mature and balanced personality and build a sound basis for marriage, family life, and constructive community life. The character guidance program has been devised to accomplish this purpose.

2. Prophylaxis. Mechanical, chemical, and antibiotic methods of prevention are available for those servicemen who, for one reason or another, expose themselves to possible infection. They fail to appreciate the inherent limitations and effectiveness of these measures. Because of the conditions under which they are used-the inopportuneness, the messiness, the alcoholic inhibition factor, the time factor-these and many other considerations, it is imperative to de-emphasize prophylactic measures as a major part of the preventive program.

3. Measures are taken to maintain morale through effective leadership, a thorough understanding of the over-all objective of the services (why we are fighting), a fair distribution of the work, proper job placement and utilization, and adequate recreation.

CONTROL PROGRAM

Control measures are designed to detect and treat cases of venereal diseases as soon as possible after they are contracted. The control principles used by the military authorities are similar to those used in civilian practice:

1. Screening tests through periodic examination of the serviceman.

2. Voluntary reporting to a medical officer should a serviceman suspect that he may have acquired a venereal disease.

3. Contact investigation, to elicit the names, addresses, and circumstances surrounding each exposure with all contacts and with those persons exposed by the patient, within the maximum incubation period of the disease, from date of onset of the patient's symptoms to the moment treatment could be expected to be effective. Contact investigation also aims at the re-education and orientation of the patient.

Complementary Civilian Program:

The civilian program, like that of the military, can be divided logically into two phases–measures aimed at prevention and at control.

PREVENTIVE PROGRAM

1. The civilian community is responsible for seeing to it that by the time an individual has reached military age, he has, through proper home training, religious instruction, and community socialization, developed a mature and balanced personality and a self-disciplined character.

2. The repression of commercialized and clandestine prostitution is the responsibility of civil law enforcement authorities.

3. The civilian community should also provide an environment, during the off-duty hours of military personnel, which is not only safe and wholesome, but which, integrates the recreational and social activities of the servicemen with those of the community's civilian components.

CONTROL PROGRAM

1. Participation of the civilian health department in the military venereal disease control program implies that the former maintains and operates an efficient and well-ordered venereal disease control program. This should include adequate case-finding, diagnostic, treatment, and case-holding procedures for the venereal diseases for the civilian population.

2. Contacts of military personnel should be investigated with dispatch. Once these contacts have been found and examined, a report of their medical disposition should be forwarded without delay by civilian health departments to the proper military authorities.

3. Military personnel who are contacts of infected civilians should be reported to the appropriate medical commands of the military services, and the results of the medical examination of the named servicemen forwarded by the military authorities to the reporting civilian agency.

4. Civilian venereal disease control officers should actively participate in the work of the armed forced disciplinary control boards to safeguard the health, welfare and morals of armed forces personnel.

Joint Program:

These, in brief, are the general duties and responsibilities of both military and civilian authorities in their joint program for venereal disease control. Failure of one of the contracting parties to live up to his end of the agreement forecasts a pessimistic future for the military control program. However, there are times when, because of the exigencies of the moment, some of the services cannot be adequately carried out. Such a situation arose in Massachusetts. The demands of the United Nations in Korea, requiring the transfer of trained and key personnel

to the front, left Fort Devens without trained venereal disease interviewers. As the rotation of men continued, this lack was sorely felt. Like many military stations in the United States, the venereal disease rate at Fort Devens did not require the fulltime services of a venereal disease interviewer. However, there was no question that the military venereal disease control program would profit from the services of such an individual. Therefore, the services of three well-trained nurse and venereal disease epidemiologists from the Massachusetts Department of Public Health were offered and accepted. These nurses carry out a specialized program in venereal disease control and operate from venereal disease clinics located approximately 10 miles from the post. From these clinics, the epidemiologists carry out their venereal disease control activities in a given number of communities surrounding their clinics. This pattern exists throughout the State where there are 24 clinics located in general hospitals (with 3 exceptions), each with an epidemiologist, so that complete coverage of all communities in the State is assured.

The experiences of the Fort Devens hospital since September 1951, when the services of the epidemiologists were made available, to February 1, 1952, a period of 5 months, are summarized in this paper. The station hospital still has the services of these nurses and more complete reports will be given as data are accumulated.

Methods

A simple but effective system of contact investigation has been set up. The out-patient department facilities of the station hospital at Fort Devens have been so arranged that patients referred to the venereal disease clinics or voluntarily referred to the venereal disease clinics or voluntarily reporting for examination are seen in the morning. After an appropriate examination, the necessary laboratory tests are performed. Reports of the laboratory examinations are ready by 1 : 00 p. m., in time for the afternoon clinic. Patients who were examined in the morning are requested to return in the afternoon, when, with all laboratory reports available, a definitive diagnosis can be made, Once the diagnosis has been established and confirmed by laboratory tests, the patient is interviewed by the nurse epidemiologist in a private room at the clinic. The schedule for the nurses has been so arranged that, each afternoon 5 days a week, one epidemiologist is detailed for interviewing at the clinic. Two of the nurses report two afternoons a week, and a third at one afternoon session. If no patients are examined in the morning, the nurse on call for that afternoon is notified by phone, thus releasing her for other duties.

FUNCTION OF THE EPIDEMIOLOGISTS

The epidemiologists have a threefold function. Their primary responsibility is to ascertain the identity and description of contacts, as well as circumstances surrounding the exposures, for example, place, age, date of encounter and exposure,

and relationship of the contacts to the patient. This information is given to a corpsman, who transcribes it on the military epidemiological report forms and routes copies of form to the health departments of the States where the contacts are reportedly located, or to city health departments when so indicated by military regulations.

The second responsibility of the epidemiologists, carried out during the interview, is to re-educate and reorient the patient.

Equally important is the third undertaking of the nurse, the proper indoctrination and individual training of the hospital corpsmen.

The names and addresses of all contacts are obtained whenever possible, regardless of whether they may be in Massachusetts or from other States or countries. The service is comprehensive. However, for contacts most likely to be found in Massachusetts, the nurse epidemiologists transcribe the contact data on Massachusetts forms in additiion to the military reports. Copies of the Massachusetts epidemiological forms are sent directly to the epidemiologist in whose district the contact may be located, and the original copy, as well as the military forms, are sent directly to the Massachusetts Department of Public Health, Division of Venereal Diseases. When complete identifying information is obtained, the data is immediately telephoned to the central office where it is the responsibility of the division staff to locate the appropriate nurse in the field and relay the information to her. The forms follow in routine fashion.

Such is the system which has been arranged-simple yet effective.

Results

During the period of January to August 1951, inclusive, a total of 175 cases of venereal disease was diagnosed at the United States Army Hospital, Fort Devens, Mass. There were 159 patients with gonorrhea and 16 infected with syphilis. Of the latter, 12 were in the primary or secondary stages (lesion syphilis) and 4 in the early latent stage. The corpsmen were able to elicit the names of 1.13 contacts per patient with gonorrhea and of 1.58 contacts per patient with lesion of syphilis.

However, during the first 5 months of this study, September 1951 to January 1952, when infected patients were interviewed by the nurse epidemiologists from the Massachusetts Department of Public Health, Division of Venereal Diseases, a total of 136 cases of venereal disease was diagnosed at Fort Devens. Of this number, 113 represented cases of gonorrhea, 21 syphilis, and 2 granuloma inguinale. Of the syphilis patients, 13 were in the primary or secondary stages, 6 had latent syphilis, and 2 were in the late stages. The nurses were able to obtain 1.29 contacts per patient with gonorhea; the contact-patient index for lesion of syphilis was 3.46.

MILITARY INTERVIEWERS

Gonorrhea. The military interviewers were able to elicit identifying information on 179 contacts of the 159 patients with gonorrhea. The contact data were examined and it was concluded that complete identifying information had been obtained on 66 (36.9 percent). The information, whether complete or incomplete, was transcribed on the military epidemiological report forms and sent to the States in which the contacts were most likely to be found. As a result of the information furnished to the States, including Massachusetts, 61 (34.1 percent) of the contacts were found and examined. The epidemiological index was 0.33 since 53 of the contacts were found to be infected. When the contact information was adequate, 56.1 percent of the contacts were located and examined in contrast to the 21.2 percent who were located when the contact data were incomplete.

Lesion Syphilis. There were 12 patients with primary or secondary syphilis and the military interviewers were able to obtain information on 19 of their contacts, a contact—patient ratio of 1.58. The contact data were deemed complete or adequate in 4 (21.1 percent) and incomplete in 15 (78.9 percent) cases. The contact information was sent to the respective States and 10 (52.6 percent) of the contacts were found and examined, 5 in Massachusetts and 5 in other States. The epidemiological index was 0.17. When contact information was complete 75.0 percent of the contacts were located and examined in contrast to the 46.7 percent who were found when the information was incomplete.

SPECIALIZED NURSE INTERVIEWERS

Gonorrhea. During the period covered by this report the nurses interviewed 113 patients with gonorrhea and obtained information on 146 contacts, a contact-patient index of 1.29. This is not very different from the 1.13 contact-patient ratio obtained by the military interviewers, and the difference between the two is not statistically significant. However, when the adequacy of the contact data and the number of contacts found and examined are studied, one finds a significant difference, for 50.7 percent of the contact information obtained by the nurses was complete and 43.2 percent of the contacts were found and examined. The epidemiological index for all States for gonorrhea was 0.47.

Lesion Syphilis. There were 13 patients with primary or secondary syphilis and the nurses obtained the names of 45 contacts, a contact-patient ratio of 3.46. This is in contrast to a contact-patient index of 1.58 obtained by the military interviewers. The contact data were considered complete in 25 (55.6 percent) cases and incomplete in 20 (44.4 percent). These data were sent to the various States in the routine manner and 19 (42.2 percent) were located and examined. The epidemiological index was 0.38.

Conclusions:

Contact interviewing is a highly specialized art requiring the services of well-trained personnel. Experiences of the Massachusetts State Health Department with the Fort Devens hospital have been very satisfactory. They suggest that other Army hospitals might well consider the advisability of a closer liaison with civilian health authorities, particularly if welltrained military interviewers are not available. More careful attention to contact investigation is needed.

Drs fiumara Segal & Jolly:—Public Health Reports, Vol. 68, No. 3, March, 1953, PP. 289–294.

Antibiotic treatment of treponemal diseases

Although aureomycin, chloromycetin and terramycin have been demonstrated to have treponemicidal effect, knowledge accumulated at present does not indicate that they will play an immediate role in the control of treponemal diseases. Nor was it considered likely that at the present time the use of peroral antibiotics, including, penicillin, would cause a major realignment of health techniques used in treponematosis control. Penicillin has been demonstrated to be the most outstanding of the effective antibiotics in syphilis, bejel, yaws and pinta, and in reviewing available data on its usefulness the committee found no evidence that true penicillin resistance has been observed in treponemes so far. Constant vigilance should, however, be exercised to detect any such resistance developing in the future, and WHO should investigate any suspected evidence through the International Treponematosis Laboratory Centre and other laboratory as well as clinical institutions.

Since the third session of the committee three years ago a significant further change in the attitude of the medical profession throughout the world had become apparent, the conclusion being reached that therapy with penicillin in early infectious syphilis (and other treponemal diseases) is preferable to treatment with arsenicals and bismuth when all factors–efficacy, toxicity, ease of administration and cost–are considered. There was also a growing recognition that there is no advantage in supplementing the results obtainable with penicillin by concomitant or subsequent injections of "adjuvant" metal chemotherapy. The committee is basing this outlook on the views expressed in consultation between WHO and a number of recognized experts, members of the WHO Advisory Panel, from many countries, and the opinion expressed in presentations before the Tenth International Dermatological Congress as well as on the unanimous considerations of the members of the Expert committee itself in this regard.

The fate of penicillin in the host and its therapeutic effectiveness depends on many factors including the distribution of penicillin in body fluids and organ tissues in relation to dosage, vehicle and blood concentration. The latter does

not necessarily picture directly the therapeutic effectiveness, tissue retention or absorption etc. Available knowledge indicates generally, however, that prolonged exposure of treponemes to the action of penicillin at a therapeutic level as reflected in the (tissue and) blood concentrations over a period of time is necessary. Such exposure can be obtained with repository preparations.

Minimal therapy for the individual clinic patient with venereal syphilis
Early syphilis:

In individual clinic patients with primary syphilis treatment should be a minimum 2.4 mega units of repository penicillin, and patients with secondary syphilis should be treated with a ***minimum of 4.8 mega units.*** The committee considered that in all cases, a large initial dose—no less than half the total minimal doses noted above—should be given to assure reasonably effective therapy, since in many areas the patient may not return for further injections, with such a large initial "insurance" dose a high proportion of cures will result. In view of the fact that the duration of an effective (blood) tissue penicillin concentration is the most important single consideration the treatment of treponemal infections, there is an advantage in the individual clinic patient of dividing the total dosage into several injections; this might permit utilization of various public health techniques which are considered essential to good venereal-disease control (epidemiological investigations, education of the patient, clinical and serological follow-up).

Latent and late syphilis:

Because of its demonstrated superiority over previously available forms of therapy, penicillin is the treatment of choice also in other forms of syphilis. Detailed optimum schedules of therapy could not be recommended at this time, but in no case should less than 4.8 mega units be given to patients with late or latent syphilis.

Although sufficient time has not elapsed to judge the insurance value of penicillin therapy in late latent syphilis vis-a-vis the known effectiveness of arsenicals and bismuth, the committee found no reason to believe that it will prove to be inferior in view of the known efficacy of the antibiotic in neurosyphilis and so-called late benign syphilis.

Syphilis in pregnancy:

At least one serologic test for syphilis should be carried out during each pregnancy; whenever possible a second test should be made in the last trimester Treatment with penicillin alone should be given as soon as a diagnosis of syphilis in pregnancy is established; the amount should not be less than 4.8 mega units of PAM. When facilities for clinical and quantitative serological examination plus assurance of adequate follow-up are not available, penicillin treatment might be repeated during each subsequent pregnancy.

***Infantile congenital syphilis*:**

In the light of increased experience with the use of penicillin in early congenital syphilis and considering the generally increased availability of the antibiotic, minimal therapy in this condition should be 200,000 units of penicillin per kilogram of body weight. Experience obtained with PAM in children over the last few years indicates that this preparation is a useful alternative for aqueous penicillin.

***Late congenital syphilis*:**

The treatment of late congenital syphilis should be as intensive as that used in late acquired syphilis, with adjuvant therapy given whenever indicated (e. g. cortisone locally for interstitial keratitis).

Specimen treatment schedules for various forms of syphilis applicable in the individual clinic case of different forms of syphilis are given below:

SPECIMEN TREATMENT SCHEDULES OF SYPHILIS WITH PROCAINE PENICILLIN G IN OIL WITH 2% ALUMINUM MONOSTEARATE-PAM-IN THE INDIVIDUAL CLINIC PATIENT

***Primary Syphilis*:**

Megaunits of PAM	Day 1	2	3	4	5	6	7	8	9	10	11	12	13
	2.4												
	1.2	—	—	—	1.2								
	1.2	.6	.6										
	1.2	—	.6	—	.6								
	1.2	—	—	.6	—	—	.6						
	1.2	—	—	—	.6	—	—	—	.6				
	1.2	.3	.3	.3	.3								
	1.2	—	.3	—	.3	—	.3	—	.3				
	1.2	—	—	3.	—	—	.3	—	—	.3	—	—	.3

***Secondary Syphilis*:**

Megaunits of PAM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	4.8																
	2.4	—	—		2.4												
	2.4	1.2	1.2														
	2.4	—	1.2	—	1.2												
	2.4	—	—	1.2	—	—	1.2										
	2.4	—	—	—	1.2	—	—	—	1.2								
	2.4	.6	.6	.6	.6												
	2.4	—	.6	—	.6	—	.6	—	.6								
	2.4	—	—	.6	—	—	.6	—	—	.6	—	—	.6				
	2.4	.3	.3	.3	.3	.3	.3	.3	.3								
	2.4	—	.3	—	.3	—	.3	—	.3	—	.3	—	.3	—	.3	—	.3

J. S. Mekenzie Pollock–WHO Expert Committe report.

Madhya Pradesh yaws control to be expanded—Hyderabad and Madras States joining in scheme

Large-scale yaws-control measures begun late last year in Madhya Pradesh are soon to be extended to Hyderabad and Madras States, it was announced by the WHO Regional Office for S. E. Asia, which is assisting the State Governments in their work.

In addition, the campaign in Madhya Pradesh itself will be expanded as part of the drive to bring yaws under effective control in an area of approximately 50,000 square miles where it is especially prevalent.

The programme is regarded as particularly significant in the larger context of the social objectives laid down in the Five Year Plan.

This first mass campaign in India using penicillin against yaws, a crippling disease similar to syphilis but non-venereally transmitted, was launched on 22 November 1952 at Ahiri, Chanda District, Madya Pradesh.

Since then, three mobile teams consisting of five persons each, with a physician or a sanitary inspector in charge, have moved from village to village in little explored hill country near the Abushmar Mountains and in the Pranhita River Valley, some 175 miles south-southeast of Nagpur, carrying out mass examinations and contacts wherever necessary.

A fourth team will go into action within the next few weeks, while a fifth will be added after the rainy season.

200 VILLAGES COVERED SO FAR

By 31 March 1953 nearly 90% of the population in over 200 villages, inhabited mainly by aborigines of the "Maria" group, had been examined. All cases of yaws, as well as other persons in close contact with them, were treated with the recommended dosage of a single injection of PAM (Procaine penicillin "G" in oil, with 2% aluminium monostearate).

STAFF ALREADY TRAINED

A considerable number of staff who will be working with the Hyderabad teams have already had special field training with the groups active in Madhya Pradesh. Similar field training will be given to staff recruited for the Madras teams.

Dr. E. E. Kruizinga, WHO yaws specialist will proceed to Hyderabad around the middle of June to commence operations there before going on to Madras for the same purpose.

Dr. Kruizinga estimates that yaws can be brought under effective control within about three years, thus eliminating the disease as a public-health problem

in the entire area. He further reports that the co-operation of the people, as well as of all the local authorities, has been excellent.

The campaign is being carried out to further the social aims of the Five Year Plan in raising the status of tribal groups.

In addition to the technical guidance which WHO is giving, penicillin and other supplies such as transport and field equipment have been contributed by UNICEF to the extent of Rs. 1,85,250 ($ 39,000) for this year alone. The entire campaign is, however, the responsibility of the respective State Governments.

WHO Press Release, New Delhi, 26-5-53.

The Honorary Secretary, Hind Kusht Nivaran Sangh (Indian Leprosy Association) at 2, Talkatora Road, New Delhi 2, in their letter of the 13-5-1953 informs us that the Leprosy Training Course will be held at the School of Tropical Medicine at Calcutta from 15th July to 14th August 1953, both days inclusive. The selection of candidates will be made by Dr. Dharmendra, Officer-in-Charge, Leprosy Research Department, School of Tropical Medicine. It is requested therefore that names of candidates may be submitted direct to him.

The value of the course would be greatly enhanced if officers of senior grade are sent up for training and it is therefore requested that such doctors, who have special aptitude for leprosy work, should be nominated.

No registration fee will be charged for candidates attending the course. Their travelling, board and lodging expenses should, as usual, be met either by the State Branches concerned or by the doctors themselves or their employers.

Syllabus for the Leprosy Training Course held under the auspices of Hind Kusht Nivaran Sangh (Indian Leprosy Association) at the School of Tropical Medicine, Calcutta, is given below.

1. *Lectures*: A course of 20 lectures covering the etiology, clinical examination, case charting, bacteriological examination, diagnosis, differential diagnosis and method of treatment and control of leprosy.

2. *Demonstrations*: The demonstrations will cover the following subjects: clinical examination, case charting, bacteriological examination, diagnsois, differential diagnosis and method of treatment.

Histopathology, the lepromin test, methods of survey and chemistry of the preparations used in the treatment.

3. *Practical Work*: Clinical and bacteriological examination of cases, case charting, treatment.

4. Tutorial Classes.

5. Examination: At the end of the course a practical and theoretical examination will be held, and certificates will be given to the successful candidates.

Syphilis as an Occupational Hazard to Physicians

Attention is called to a report on 51 extragenital chancres reported by 32 dermatologists in answers to questionnaires.

The common sites were the fingers in 35 instances. Less common sites were the nasal cavities in 6 cases, eyelid in one case and arm in one case.

Otolaryngologists were the most frequently affected group (6 cases). Interns, residents and medical students came next (6 cases), then general practitioners (5 cases), and pathologists (2 cases).

Infection occurred during routine clinical examinations in 7 physicians, during obstetric procedures in 5 cases, during tonsillectomy in 3 cases, and in 3 cases infection was caused by accidental needle punctures.

The incidence of medically acquired syphilis is low. The use of rubber gloves and antiseptics offers valuable protection. [It is interesting to note that among the group of persons affected no dermatologists or venereologists were included. The unsuspected case of syphilis is the most dangerous.]

Editorial (1952): J. Amer. Med. Assoc., 150, 1603. International Progress.

FROM OUR BOOK SHELF

1952 YEAR BOOK OF DERMATOLOGY AND SYPHILOLOGY, Edited by Marion B. Sulzberger, and Rudolf L. Baer, Publishers: The Year Book Publishers, 200 East Illinois Street, Chicago 11, Illinois. Page: 444. Price: $6. 00.

This Year-Book contains certain additions in view of the considerable progress in the therapy of dermatologic disorders. A new section on Endocrine therapy has been included due to the extensive use of ACTH and cortisone and other hormone preparations in various skin diseases.

Besides numerous reports about the progress of dermatology during the year are included. Special Section on Investigative Studies is also included.

ESSENTIALS OF DERMATOLOGY: By Norman Tobias, M. D. 4th Edition. Publishers: J. B. Lippincott Company, Washington Sq., Philadelphia, (U. S. A. Page: xvi + 596. Price. $2. 50.)

The fourth edition of this popular treatise on dermatology has undergone certain changes in view of the recent advances without altering the basic idea of placing a handy volume at the disposal of general practitioner and medical student who have no time or inclination to go through larger and standard text-book on dermatology.

Histological and theoretical descriptions are reduced to essential minimum while differential diagnosis is stressed, diagnostic features are emphasised and the therapy is comprehensive and uptodate. The numerous illustrations will facilitate the quick grasp of the subject and are well-selected and instructive. It also contains many useful prescriptions that are commonly dispensed in daily practice.

It is a valuable guide for the accurate diagnosis and treatment of dermatologic disorders and thus should be in possession of every medical man.

The paper, printing and binding are excellent and the general get up is attractive.

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- It is published quarterly, i.e. March, June, September and December of the year, and each issue contains about 60 pages and is illustrated.
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- It is edited by Dr. U. B. NARAYANRAO (Editor, MEDICAL DIGEST).

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